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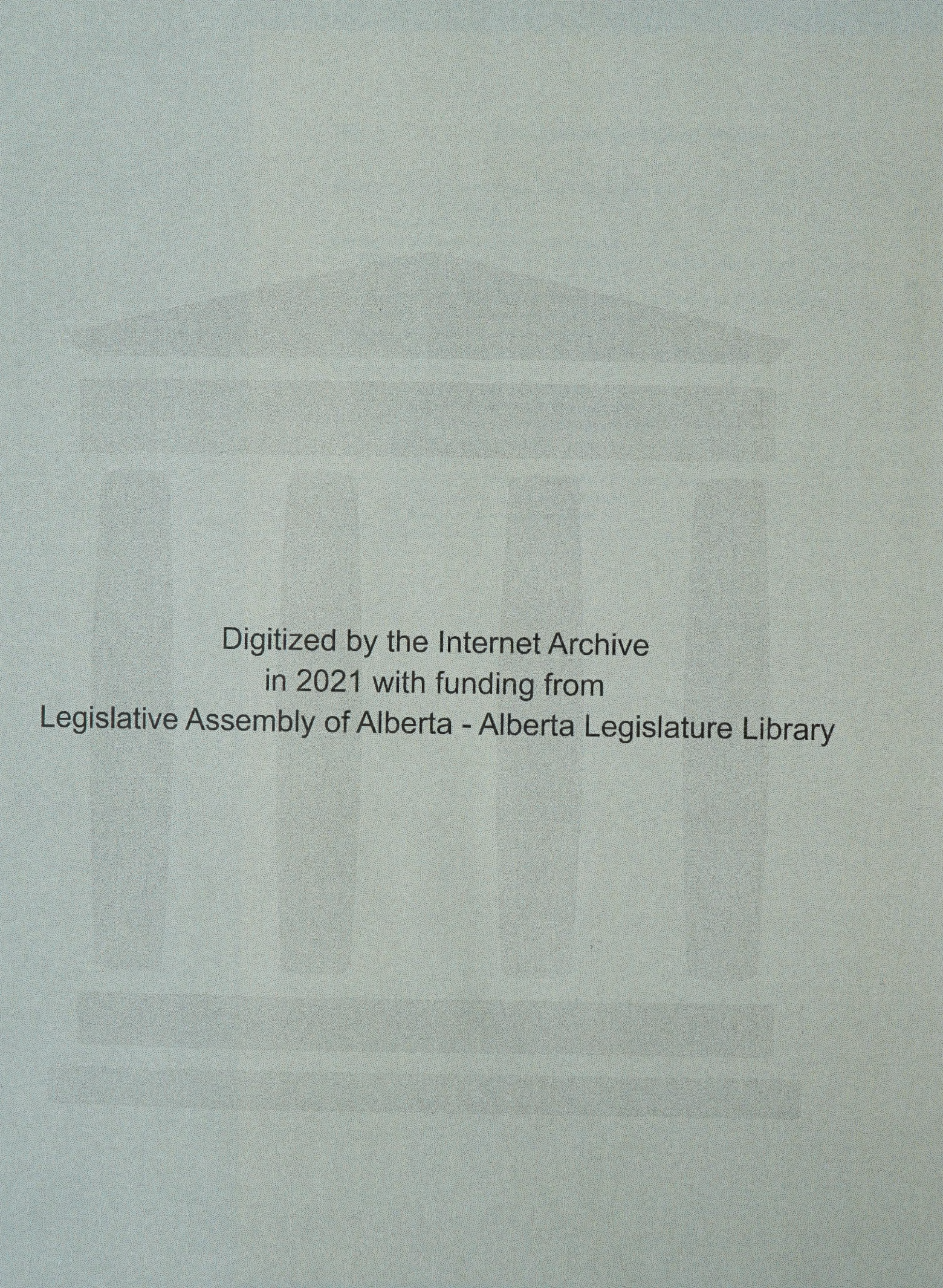
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ANNUAL REPORT  
OF THE  
DEPARTMENT OF PUBLIC WORKS  
OF THE  
NORTH-WEST TERRITORIES

1899

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PRINTED BY ORDER OF THE LEGISLATIVE ASSEMBLY

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REGINA  
JOHN ALEXANDER REID, Queen's Printer for the Territories  
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1900







DEPARTMENT OF PUBLIC WORKS,  
REGINA, *March 1, 1900.*

*To His Honour* AMEDEE EMMANUEL FORGET,  
Lieutenant Governor of the North-West Territories.

SIR,—

I have the honour to transmit herewith the Annual Report of the  
Department of Public Works for the year 1899.

I have the honour to be, Sir,

Your obedient servant,

J. H. ROSS,

*Commissioner of Public Works*







## CONTENTS.

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	PAGE
Correspondence branch.....	8
Steam Boilers Ordinance.....	8
Coal Mines Regulation Ordinance.....	11
Accountant's branch.....	14
Survey branch.....	15
Expropriation Ordinance.....	18
Engineering branch.....	27
Maintenance and repair of buildings.....	28
Repairs to public works.....	28
Construction of bridges.....	29
Construction and maintenance of roads.....	31
Maintenance of ferries.....	32
Construction and maintenance of fireguards.....	33
Providing water supply.....	34
Local Improvement branch.....	36
Villages.....	62
Irrigation branch.....	63
Conclusion.....	66
Index.....	67







DEPARTMENT OF PUBLIC WORKS,

REGINA, *January 23, 1900.*

JAMES H. ROSS, Esq., M.L.A.,

*Commissioner of Public Works.*

SIR,—I have the honour to submit the Annual Report of the Department of Public Works for the year 1899.

The past year, owing to a combination of circumstances, presented many difficulties in dealing with the purely public works portion of our Departmental work. In the first place, we began the year with applications for roads, bridges, culverts, repairs, surveys, etc., the completion of which would have necessitated the expenditure of at least twice the amount which it was found possible to set aside for public works; and secondly, the very unusual floods which occurred in all parts of the Territories in the early part of the season caused serious damage to, and in numerous cases a total loss of, many of our existing roads, bridges and ferries. The Department was therefore placed in the position of not only being unable to undertake a large portion of the new work known in the early part of the season to be necessary, but owing to lack of funds was prevented from replacing many of the bridges and ferries carried away by the floods, or undertaking the repair of roads damaged from the same cause.

This unfortunate position naturally led to some complaint throughout the Territories, and the effort to explain the situation, and meet it as far as possible, added largely to purely routine Departmental work, as will be noted from the statement of work of the correspondence branch given below.

At the beginning of the year the Departmental changes foreshadowed in the annual report for 1898 were brought into effect, Mr. R. C. Laurie D.L.S., being appointed Assistant Chief Surveyor, and Mr. J. T. Child, C.E., Assistant Chief Engineer. At the same time the outside offices of District Engineers and Surveyors were abolished and the work formerly carried on through those offices centralised at head quarters. The improvement in administration and saving in expenditure which was expected to result from these changes has, I am pleased to state, been realised and no difficulty has been experienced in carrying on both our engineering and survey work directly from head quarters.

When the above mentioned additions were made to the permanent staff of the Department a reorganisation of the Departmental work was effected by dividing it among distinctive branches so as to permit of proper and prompt administration. The branches organised were as follows:



Correspondence Branch,  
 Surveys Branch,  
 Engineering Branch,  
 Accountant's Branch,  
 Local Improvement Branch,  
 Irrigation Branch.

In dealing in the following pages with the work of the Department during the year the above subdivision is followed for convenience of reference and proper continuity.

#### CORRESPONDENCE BRANCH.

Staff { 1 correspondence clerk.  
 { 2 stenographers and type writers.

This branch is charged with all the correspondence of the Department, including the proper record of letters received and sent and the preparation and indexing of files. The Departmental work in connection with the administration of the Steam Boilers and Coal Mines Regulations Ordinances is also delegated to the Branch as well as routine matters of purchase of fuel, furniture, office supplies, etc., for both inside and outside offices.

The volume of correspondence dealt with in the correspondence branch is a very fair measure of the work of the Department, and the following statement will serve as an indication of the business during the past year :

Number of letters received, recorded and attached to proper files, .....	12,773
Number of letters sent and copies attached to proper files, .....	14,161
Number of specially printed or mimeograph forms mailed, .....	7,000
Average number of communications dealt with daily during the year, including mailing forms, .....	113

#### THE STEAM BOILERS ORDINANCE.

In administering this Ordinance an outside staff of two inspectors is employed, the Departmental portion of the work being conducted through the correspondence branch as already mentioned. The work connected with the administration of this Ordinance during the past year may be summarised as follows :

Number of steam boilers inspected, .....	380
Number of first class engineers' certificates issued, ....	20
Number of second class engineers' certificates issued, ..	27
Number of third class engineers' certificates issued, ...	40
Number of provisional engineers' certificates issued, ..	304
Number of permits for operation of boilers issued .....	28



## Fees collected :

For inspections, .....	\$1,860
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## For examinations :

First class certificates, .....	\$ 15
Second class certificates, .....	81
Third class certificates, .....	120
Provisional certificates, .....	909
Permits, .....	84
	<hr/>
	1,209
	<hr/>
	\$3,069

The administration of The Steam Boilers Ordinance is now working very smoothly and the careful inspection which is being made of all stationary boilers will certainly minimise to a very great degree the probability of bad boiler explosions with the consequent loss of life.

One of the difficulties met with in inspecting boilers and properly controlling the pressure of steam carried is that the ordinary safety valve with which most boilers are provided can be changed, after being set by the inspector, so as to carry a greater pressure of steam than the certificate of inspection allowed. Action of this kind by owners or operators of boilers of course defeats the object aimed at in making inspections and at the same time places the inspector in an awkward position should an explosion occur. It was therefore decided in the early part of the year that all boilers should be provided with a "pop" safety valve which could be set and locked by the inspector so as to make it certain that the boiler would not be made to carry a greater pressure of steam than his inspection proved it capable of withstanding with safety. This rule, together with certain others regarding the examination and classification of engineers, was brought into force by regulations approved by Order in Council under the provisions of section 26 of the Ordinance.

It may be noted as a matter of interest that our Steam Boilers Ordinance introduced into Canada the system of the examination and issue of Government certificates of qualification to engineers employed in operating what are called stationary engines and boilers, and that the law is now considered a good one is indicated by the fact that the Association of Stationary Engineers in Ontario has petitioned the Provincial Government for the enactment of what is practically a similar law, and in other of the Provinces certain of the provisions of our Ordinance regarding the inspection of boilers have been adopted.

Mr. W. C. Wilcox, Inspector of Steam Boilers in the eastern portion of the Territories, resigned his position in November last. No appointment has yet been made to fill the vacancy caused by his resignation.

For the purpose of general public reference a schedule is appended of the present holders of certificates of qualification under The Steam Boilers Ordinance :



*Schedule of Holders of Certificates of Qualification under The Steam Boilers Ordinance.*

NAME	ADDRESS	DATE OF ISSUE
<i>First Class</i>		
McNabb, Franklin .....	Fort Qu'Appelle .....	28 March, 1899
Cross William .....	Calgary .....	do
Liston, Robert F. ....	Battleford .....	29 March, 1899
Holden, William John .....	Indian Head .....	28 March, 1899
Turgeon, Cleophas .....	Edmonton .....	do
Mayhew, William .....	Broadview .....	do
Cook, George .....	Regina .....	do
Kirkland, Thomas .....	Yorkton .....	do
Carment, Wm. Maxwell .....	Kamsack .....	do
Taylor, George R. ....	South Edmonton .....	do
Evans, Dan .....	Calgary .....	do
Collison, George .....	Coalfields .....	do
Scott, John .....	Lethbridge .....	do
Brisette, Narcisse .....	Morinville .....	do
Bell, John .....	Prince Albert .....	do
Smith, Percy Lewis .....	Prince Albert .....	4 April, 1899
Smith, John McKenzie .....	Prince Albert .....	do
Sutherland, James A. ....	Broadview .....	29 September, 1899
Fraser, David .....	Strathcona .....	9 October, 1899
McNaughton, Peter .....	Edmonton .....	do
<i>Second Class</i>		
Cape, Edmond G. M. ....	Lethbridge .....	30 June, 1899
Codd, Edward J. ....	Macleod .....	do
Walker, J. B. ....	Lethbridge .....	do
McKay, Daniel .....	Lethbridge .....	do
Reed, R. W. ....	Lethbridge .....	do
Parcels, Timothy P. ....	Red Deer .....	4 September, 1899
Bawtinheimer, Geo. H. ....	Red Deer .....	do
Stapley, Tobias B. ....	Edmonton .....	do
Holliott, L. H. ....	Grenfell .....	29 September, 1899
Amas, Frank .....	Qu'Appelle Station .....	do
Green, George .....	Moose Jaw .....	do
Payzant, Ernst M. ....	Edmonton .....	9 October, 1899
Hubbard, Sydney T. ....	Edmonton .....	do
Jones, Fredk. W. ....	Strathcona .....	do
Clark, W. Harold .....	Edmonton .....	do
Pratt, George .....	Edmonton .....	do
Schatz, Wm. H. ....	Strathcona .....	do
Watson, Ernest P. ....	Strathcona .....	do
Hennigar, Edward J. ....	Edmonton .....	do
Thompson, R. D. ....	Wolseley .....	13 November, 1899
Macey, Charles R. ....	Oxbow .....	15 November, 1899
Cumming, Thomas C. ....	Whitewood .....	do
Hamill, Thomas T. ....	Whitewood .....	do
Collopy, Alexander .....	Alameda .....	do
More, Robert .....	Bredenbug .....	do
Brayne, Jos. ....	Calgary .....	1 December, 1899
Shaw, Maltman W. S. ....	Midnapore .....	do
<i>Third Class</i>		
Prince, Joseph A. ....	Battleford .....	11 July, 1899
Smith, Gavin G. ....	Battleford .....	do
Ramsey, David .....	Winnipeg .....	1 August, 1899
Stadelbauer, Simon .....	Spruce Grove .....	18 September, 1899



*Schedule of Holders of Certificates of Qualification under The Steam Boilers Ordinance.—Continued.*

NAME	ADDRESS	DATE OF ISSUE
<i>Third Class</i>		
Russell, Alex. B . . . . .	Regina . . . . .	29 September, 1899
Black, Walter M . . . . .	Wolseley . . . . .	do
Krienke, C. F . . . . .	Wolseley . . . . .	do
Aldous, Robert B . . . . .	Lorlie . . . . .	do
Hailey, William . . . . .	Wolseley . . . . .	do
Fotheringham, James . . . . .	Grenfell . . . . .	do
Dash, Albert . . . . .	Grenfell . . . . .	do
Thompson, Charles K . . . . .	Wolseley . . . . .	do
Dixon, William . . . . .	Sintaluta . . . . .	do
Getty, Samuel . . . . .	Moose Jaw . . . . .	do
Brown, Frank . . . . .	Indian Head . . . . .	do
Johnstone, Thomas . . . . .	Qu'Appelle Station . . . . .	do
Fletcher, Alex . . . . .	Moose Jaw . . . . .	do
Thompson, Hugh . . . . .	Moose Jaw . . . . .	do
Smith, N. T . . . . .	Moose Jaw . . . . .	do
Smith, James W . . . . .	Moose Jaw . . . . .	do
Ingram, Isaac . . . . .	Strathcona . . . . .	9 October, 1899
Vogel, William . . . . .	Strathcona . . . . .	do
Currie, Laughlin . . . . .	Strathcona . . . . .	do
Hewer, Jessey James . . . . .	Strathcona . . . . .	do
Cameron, John . . . . .	Edmonton . . . . .	do
Robinson, John . . . . .	Edmonton . . . . .	do
Ottewell, Richard P . . . . .	Edmonton . . . . .	do
McKernan, James . . . . .	Edmonton . . . . .	do
Witmer, Abraham M . . . . .	Strathcona . . . . .	do
Stewart, Thos. H . . . . .	Strathcona . . . . .	do
King, John . . . . .	Regina . . . . .	13 October, 1899
Sanders, S. B . . . . .	Grenfell . . . . .	15 November, 1899
Clement, Lewis J . . . . .	Carnduff . . . . .	17 November, 1899
James, William H . . . . .	Whitewood . . . . .	do
Cross, William . . . . .	Crescent Lake . . . . .	do
Ritchie, Charles . . . . .	Cut Arm . . . . .	do
Blatchford, Peter . . . . .	Edmonton . . . . .	28 November, 1899
Smith, William F . . . . .	Athabasca Landing . . . . .	do
Morkin, John . . . . .	Dunbow . . . . .	1 December, 1899
Shaw, John York . . . . .	Midnapore . . . . .	do

THE COAL MINES REGULATION ORDINANCE.

Outside staff . . . . . 1 inspector

The number of coal mines operated in the Territories during the past year shows a slight increase over the previous year, the number in operation being 30 as compared with 26 in 1898, but the total output of the mines and number of men employed do not show corresponding increases, as will be noted from the accompanying schedule :



*Schedule of Coal Mines in operation in the Territories during 1899.*

NAME OF MINE	LOCATION	OPERATED BY	CHARACTER OF COAL
Black Diamond.....	Strathcona, Alta .....	Jno. G. Tipton .....	Bituminous
White Star.....	Calgary, Alta.....	Tempest & Co .....	do
Black .....	St. Albert, Alta.....	Edward Chevigney .....	do
Sturgeon .....	do .....	Frank Smith .....	do
Sturgeon .....	do .....	Robert Kelly .....	do
Milner's .....	Edmonton, Alta .....	John Milner .....	do
Baldwin .....	do .....	Pratt & Coit .....	do
Steeves, No. 1 .....	Strathcona, Alta.....	D. Steeves .....	do
Steeves, No. 2 .....	do .....	D. Steeves .....	do
North Star, No. 1 .....	do .....	Ed. Martin .....	do
North Star, No. 2 .....	do .....	Ed. Martin .....	do
Moran's .....	Edmonton, Alta .....	Sam. Moran .....	do
Humberstone's .....	do .....	Wm. Humberstone .....	do
Clover Bar, No. 1 .....	Clover Bar, Alta.....	Basil Sotare .....	do
Clover Bar, No. 2 .....	do .....	Basil Sotare .....	do
Cunliffe's .....	Fort Saskatchewan, Alta .....	P. B. Cunliffe .....	do
McAllister .....	Edmonton, Alta .....	James McAllister .....	do
Pearce's .....	do .....	Pearce & Co .....	do
Anthracite .....	Anthracite, Alta.....	H. W. McNeil Co., Ltd. ....	Anthracite
Canmore .....	Canmore, Alta.....	H. W. McNeil Co., Ltd. ....	Bituminous
Sheep Creek .....	Sheep Creek, Alta .....	J. A. Bangs .....	do
Black Diamond .....	Sheep Creek, Alta .....	Cooper & McPherson .....	do
Lethbridge .....	Lethbridge, Alta.....	Alberta Railway & Coal Co .....	do
St. Mary's River.....	St. Mary's River .....	George Hoak .....	do
Crockford .....	South Medicine Hat, Assa .....	Crockford Bros. ....	do
Culley .....	do .....	George Culley .....	do
Gillespie .....	do .....	William Gillespie .....	do
Sonden .....	do .....	Robert Sonden .....	do
Roche Percee.....	Coalfields, Assa.....	Roche Percee Colliery Co. ....	do
Hassard .....	do .....	Souris Coal Mining Co. ....	do

The output of the thirty mines above mentioned during the past year and the number of men employed in coal mining was as follows :

Number of men employed .....	822
Bituminous coal mined .....	324,100 tons
Anthracite .....	22,129

In 1898 the corresponding figures regarding number of men employed and output of coal was as follows :

Number of men employed .....	832
Bituminous coal mined .....	315,661 tons
Anthracite .....	23,000

The number of accidents connected with coal mining during the past year shows a decrease of seven as compared with the previous year, the location and character of the accidents reported being shown in the accompanying schedule :



*Schedule of Accidents at Coal Mines during 1899.*

NAME OF MINE	CHARACTER OF ACCIDENT			TOTAL OF ACCIDENTS
	Resulting in death	Serious injury	Slight injury	
Lethbridge .....	1	2	7	10
Anthracite .....	2	..	..	2
Canmore .....	1	..	..	1
The Territories .....	4	2		13

The above return of accidents is probably incomplete, as the owners of the smaller mines have failed to report accidents and some of the larger mine owners content themselves with reporting accidental deaths only. Indirectly we have heard of two or three accidents which have occurred in the smaller mines not included in the above list.

The percentage of deaths to number of tons of coal mined is still larger than it should be but the evidence available indicates that the majority of deaths are due to carelessness of the miners and not to faulty methods of mining or poor machinery or appliances, particularly in the larger mines.

The Inspector of Coal Mines made frequent inspections of all the mines during the past year. This close supervision of coal mining operations has resulted in an improvement in the methods of mining at many mines, but much difficulty is still experienced in dealing with the smaller mines, many of which are only operated for short periods in the fall or during the winter when the local fuel market affords an opportunity for selling coal. Owing to the fact that these mines are worked in a somewhat spasmodic manner, and that in many cases as soon as the workings reach any considerable depth they are abandoned for new seams which can be more easily worked from the surface, it is hard to get the owners to realise the importance of providing proper ventilation or means of exit in case of accident. On the whole the Inspector's reports indicate a willingness on the part of the larger number of the smaller mine owners to comply as far as possible with the provisions of the Ordinance, but in a few instances serious infringements of the rules and regulations have been reported and in these cases action has had to be taken upon the Inspector's recommendation in the line of forcing the owners of these mines to cease operations until proper ventilation and means of exit could be provided.

Although, as is shown above, over eight hundred men are employed in coal mining in the Territories, the industry may be said to be still in its infancy, and it is therefore particularly desirable that those engaged therein should be educated to a proper appreciation of the necessity for safe methods of working so that we may, as far as possible, when coal mining assumes the proportions which it certainly will do in the near future, avoid the accidents with the deplorable loss of life which has characterised coal mining on this continent. Fortunately in the Territories a very large proportion of our bituminous coal deposits can be worked without the fear of encountering gas to any serious extent, but there are other

points connected with the mining of coal which permit of the occurrence of serious accidents unless proper care is taken.

Attention is again directed to the fact that much the larger part of the coal mined within the Territories is mined either for export or for consumption by the railway companies, and it would seem that the time has come when the question of imposing a duty on the coal mined for export should be considered in view of the fact that this valuable asset of the Territories is being depleted without any corresponding benefit to the revenues of the country.

The usual examinations under the provisions of the Ordinance for the issue of certificates to coal mine managers and pit and fire bosses have been held by the Inspector at different points, and certificates to candidates who have successfully passed these examinations have been issued as shown in the following schedule :

Pitt boss—Robert Scott, Lethbridge.

Fire boss—Hugh Scott, Lethbridge.

At the last session of the Legislative Assembly an amendment to The Coal Mines Ordinance was passed under which a compulsory eight hours day for those engaged in coal mining was prescribed. From the information we have it would seem that, except in the case of one or two of the larger mines, this provision of the law is being ignored both by mine owners and miners, but we have notified all mine owners and managers that the provisions of the law must in future be complied with.

A compulsory eight hours day does not meet with approval by the owners or lessees of the small mines in which only a few men, or possibly only the owner himself, is employed. Many of these small mines, as has already been stated, are worked only during the winter when the local demand for fuel offers a market for the coal mined, and the present custom is to work long hours in obtaining this coal.

#### ACCOUNTANT'S BRANCH.

Staff..... 1 Accountant Clerk

The work in the Accountant's Branch, like that in the Correspondence Branch, is a fair indication of the routine work of the Department during the year. It is true that during the past year the amount of money expended in public works showed a marked decrease over that of the previous year, but the other work of this branch, in so far as the matter of revenue collected and accounts audited and dealt with, shows an increase. The work of the branch for convenience of reference is summarised as follows :

Total amount voted for public works,.....	\$146,000 00
Total amount expended,.....	146,403 62
Number of accounts examined and passed to Treasury Department for payment, .....	2,107
Amount collected as Departmental revenue and paid to credit of general revenue,.....	\$5,298 56
Amount of taxes received from overseers of large local improvement districts, posted through books and deposited to district trust accounts .....	\$2,581 36
Number of accounts for work in large local improvement districts examined and paid, 49, equalling	\$305 55



Owing to the establishment of the large local improvement districts, as is referred to more fully further on in dealing with the Local Improvement Branch of the Department, it seems quite certain that the work in the Accountant's Branch will increase very materially in the near future, and it is quite probable that to meet this increase of work some addition will have to be made to the staff of this branch so as to relieve the accountant of certain routine duties which he now, owing to want of assistance of any kind, has to perform.

## SURVEYS BRANCH.

Staff. . . . . Assistant Chief Surveyor

The importance of the work carried on under this branch of the Department was very fully dealt with in the report for 1898. The change brought about at the beginning of the year by the appointment of an assistant Chief Surveyor has, I am glad to say, enabled us to deal more promptly and thoroughly with the question of surveys than it was possible to do under the system in vogue before his appointment. The possibility of this result was one of the points advanced in recommending the change referred to, and it is therefore gratifying to be able to state that the expected advantage has accrued therefrom.

Although the fact was referred to in the report for 1898, I may be permitted to again draw attention to the peculiar idea which seems to exist in many quarters regarding the possibility of dealing with the matter of roads without first making surveys thereof. The Crown, as represented by the Territorial Government, is of course in a position to do some things which a private individual would find difficulty in carrying out, but the generally accepted idea that the Government can open roads anywhere, without first obtaining the necessary right of way from the owners of the property affected, is of course very erroneous.

In dealing with the question of surveys there is the further fact to be considered that, owing to the vast extent of the Territories and the scattered nature of the settlement therein, great numbers of applications are received for the opening up of roads which in a sense only serve small communities, and to meet these applications necessitates the performance of many surveys of roads which might otherwise be deferred until the settlement became more intense.

During the past year the unusual rainfall and consequent filling up of many low spots and swamps, which during previous years had been dry and passable for traffic, led to the filing of a great number of applications for road allowance diversions so as to permit of these low places being avoided.

The following schedule contains detailed information regarding the 106 surveys completed during the past year. A number of these surveys were completed by the Assistant Chief Surveyor, but a very large part of his time was taken up with the preparation of instructions to the other surveyors employed and in the proper examination and recording of survey returns and the obtaining of the necessary title to the right of way for roads laid out. The volume of this part of the work of the branch is indicated by the following synopsis:

Plans received, examined, indexed and recorded . . . . .	118
Books of field notes received, examined, indexed and recorded . . . . .	21

Transfers of right of way prepared and forwarded for examination .....	146
Certificates of title to right of way for roads obtained .....	53
Plans and sketches made in branch .....	40
Preliminary agreements for right of way for roads prepared and filed after signature .....	74

#### SURVEYS MADE AND ROADS OPENED DURING THE YEAR 1899.

##### *Old Trails.*

- Wetaskiwin to Dried Meat lake (not completed), Tp 46-23 w 4.
- Fort Saskatchewan to Bevington's (part of road to Victoria), Tp 55-24 w 4.
- Maple Creek south to Gap, Tps 9, 10, 11-26 w 3.

##### *New Roads.*

- Tote road west from Calgary across Sections 13, 23-24-2 w 5.
- Road up Nose creek to Beaver Dam creek from Sec. 9-25-1 w 5 to Sec. 2-29-3 w 5.
- Bush road branching from above from Sec. 36-27-4 w 5 to Sec 14-28-5 w 5.
- West side of Beaver lake connecting with base line Tps 51, 52-18 w 4.
- Lumsden to Craven, Tps 19, 20-21 w 2.
- Calgary to Millarville, crossing Sarcee Indian Reserve.
- To Kelley's bridge across Sec. 8-55-24 w 4.
- Across centre of Sec. 10-52-23 w 4.
- Along blind line south of Sec. 12-52-23 w 4.
- To connect with Pincher Creek road across Secs. 26, 35-5-1 w 5.
- Up Mission Hill at Lebret (resurvey), Secs. 31, 32-20-12 w 2.
- Continuation of road north of Grenfell dam, Secs 17, 20-17-7 w 2.
- Along blind line between Secs. 15, 22-44-20 w 2.
- Along base line from Edmonton to Beaver lake across ranges 18, 22 w 4.
- South of Beaver lake across Sec. 33 to Sec. 36-50-18 w 4.
- Along blind line north of Sec. 13 to Sec. 15-16-9 w 2.
- West from Saskatoon one mile, south base line to west boundary of Tp. 36-6 w 3.
- Around bend of High river to connect with Macleod road, Sec. 10, 12-19-29, Sec. 7-19-28 w 4.
- Up ravine in Sec. 13-20-21, Sec. 18-20-20 w 2.
- Up ravine in Secs. 21, 22, 28, 20, 20 w 2.
- Across Leech Lake Indian Reserve.
- Westward along Qu'Appelle Valley from Lumsden to west boundary of Sec. 36-27-5, Sec. 1-28-5 w 2.
- Along shore of good Spirit lake.
- To bridge on Whitesand river, Secs. 24, 25, 36-29-4 w 2.
- Across Stony Plains Indian Reserve along blind line south of Secs. 29, 30-47-24 w 2.
- Along blind line north of Secs. 15, 16-46-24 w 2.
- To avoid Sheho lake, south half Sec. 27-30-9 w 2.
- To bridge over Qu'Appelle river at Ross' crossing, Tps 18, 19a-11 w 2.



To bridge over south bank of Qu'Appelle river at Paquin's crossing ,  
Secs. 1, 7-18-2, Secs. 17, 18, 29-18-1 w 2.

To bridge over north bank of Qu'Appelle river at same crossing, Secs. 29,  
32-18-1 w 2.

Across centre of Sec. 32-6-29 w 4.

From Gladys west to Macleod trail across Secs. 17, 18-20-28 w 4.

To High River townsite across Secs. 5, 6-19-28 w 4.

Across Weed Lake dam, Sec. 22-16-5 w 2.

Across centre of Sec. 5-51-25 w 4.

Battleford to Bresaylor from Sec. 2-44-17 to Sec. 9-46-19 w 3.

To German colony through Tps 19, 20-6, 7 w 2.

To Osler bridge through Tp 18-10 w 2.

To connect townplot of Qu'Appelle with Wide Awake road, Sec. 7-  
21-13 w 2.

Maple Creek to Graburn from Sec. 9-11-26 to Sec. 5-9-27 w 3.

Dunmore to Josephsburg from Sec. 1-12-5 to Sec. 27-9-3 w 4.

Exploratory survey of road from Mountain View to Cardston.

Exploratory survey of road from Pincher Creek to the Gap.

Exploratory survey of road from Dunmore to Medicine Hat south of  
C.P.R. track.

Exploratory survey of road from Peace River Landing to Cust House.

Survey of Peace River road from crossing of Pembina river to Peace  
River Landing.

#### *Road Diversions.*

Road to Wilson's bridge, Secs. 3, 10-55-24 w 4.

To ford in north-east quarter Sec. 36-44-23 w 4.

Parallel to railway through Secs. 35, 36-25-4 w 2.

To bridge across Qu'Appelle river in south-west quarter Sec. 32-19-21 w 2.

Around ravine in north half Sec. 7-20-20 w 2.

Up hill in Secs. 35, 2-19-21 w 2, Sec. 3-20-21 w 2.

Around slough in south half Sec. 15-19-20 w 2.

Around slough in south-east quarter Sec. 21-11-30 w 1.

Around marshy land in south half Secs. 5, 6-28-4 w 2.

To avoid two crossings of Whitesand river, Sec. 22-27-4 w 2.

Around small lake in south-east quarter Sec. 29-27-4 w 2.

Around small lake in north-east quarter Sec. 29-27-4 w 2.

Around bend of Whitesand river, north-east quarter Sec. 30-27-4 w 2.

To avoid marshy ground in north-east quarter Sec. 19, south-east quarter  
Sec. 30-27-4 w 2.

To avoid marshy ground in south-west quarter Sec. 28-27-4 w 2

To pass around Lake McOuatt, Secs 16, 21, 22-28-4 w 2.

To ford on Whitesand river, Sec. 17-28-4 w 2.

To avoid one crossing of Whitesand river, Sec. 22-28-4 w 2.

To avoid two crossings of Whitesand river, north-west quarter Sec. 1,  
north-east quarter Sec. 2-28-5 w 2.

Around bend of Whitesand river, north half Sec. 5, north-west quarter  
Sec. 4-28-5 w 2.

Around bend of Whitesand river, south half Sec. 7-28-4 w 2.

Around hay meadow in south-west quarter Sec. 2, south-east quarter  
Sec. 3-26-5 w 2.

To avoid muskeg in north-east quarter Sec. 24-27-5 w 2.

Around bend of Whitesand river, north-west quarter Sec. 7-26-3 w 2.

- Right of way to dam in Sec. 33-27-4 w 2.
- Around bends of Whitesand river, west half Secs. 12, 13-29-4 w 2.
- Around lake in south-east quarter Sec. 17-46-23 w 2.
- To avoid crossings of Melfort creek, south-west quarter Sec. 3-45-18 w 2.
- From surveyed road at Steep creek, Sec. 18-49-23 w 2.
- Around lake in north-east quarter Sec. 18-47-27 w 2.
- Around lake in south-west quarter Sec. 20-47-27 w 2.
- Approach to bridge in north-east quarter Sec. 32-46-27 w 2.
- Approach to bridge in north-west quarter Sec. 32-46-27 w 2.
- Around Muddy lake in Secs. 2, 3-56-20 w 4.
- To avoid ravine in south-east quarter Sec. 11-26-4 w 2.
- Crossing irrigation land in north-west quarter Sec. 6-2-24 w 4.
- To bridge over Pheasant creek, Sec. 21-20-10 w 2.
- To bridge over Pheasant creek, Sec. 13-20-11 w 2.
- To bridge over Pheasant creek, Sec. 7-20-10 w 2.
- To avoid muskeg, south half Sec. 16-27-4 w 2.
- From surveyed road near High River due to washing away of river bank, Secs. 6, 7-19-28 w 4.
- Around hill in Sec. 25-21-29 w 4.
- Around Calgary & Edmonton Railway in Secs. 18, 19-21-29 w 4.
- Road across corner of south-west quarter Sec. 1-44-17 w 3.
- Road across corner of south-west quarter Sec. 4-19a-7 w 2.
- Around ravine in Sec. 7-18-9 w 2.
- Up ravine in (resurvey) Secs. 9, 16-18-9 w 2.
- From surveyed road across Sec. 13-6-1 w 5.
- To culvert in north-east quarter Sec. 3-6-1 w 5.
- To culvert in south-east quarter Sec. 10-6-1 w 5.
- To culvert in south-west quarter Sec. 4-6-1 w 5.
- To bridge across Maple creek, north-west quarter Sec. 9-11-26 w 3.

*Surveys made under provisions of The Expropriation Ordinance.*

- School site in south-west quarter Sec. 27-30-9 w 2.
- Part of Grenfell road across south-west quarter Sec. 20-17-7 w 2.

*Surveys in Connection with Prosecutions.*

- For illegal maintenance of dam in north-west quarter Sec. 36-18-13 w 2.
- For illegal diversion of water in north-east quarter Sec. 16-18-19 w 2.
- For obstructing surveyed road across Sec. 26-48 24 w 2.

In addition to the work outlined above much has been done during the past year towards getting the information regarding surveys of roads and road allowance diversions made before the organisation of the Department into such shape that we can obtain the title to the right of way therefor. Owing to the chaotic state in which this branch of our work was at the time of the organisation of the Department, as is more fully referred to in the report for last year, this part of our work causes considerable trouble, and in some cases it would seem almost hopeless to look forward to getting the matters finally closed without going to the expense of resurveys.

One or two of the surveys referred to in the schedule above require more extended reference. I refer to the surveys made of the road from Peace River Landing to Fort St. John, and that of the road from the crossing of the Pembina river to Lesser Slave Lake. These surveys were made in



connection with an arrangement entered into with the Dominion Government relative to the expenditure of a sum of \$10,000.00 last year in opening up the road from Edmonton to Dunvegan and Fort St. John on the Peace River *via* Lesser Slave Lake. The work in connection with the opening up and improvement of these roads comes more properly under the heading of "road construction and improvement" than that of "surveys," but as the gentlemen who had charge of this work conducted the survey of the road at the same time the matter is dealt with here for convenience of reference. The reports of these gentlemen are given herewith, this work being a continuation of that particularly referred to in last year's report and illustrated by maps therein.

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EDMONTON, *August 21st, 1899.*

J. S. DENNIS, Esq.,

The Deputy Commissioner of Public Works,  
Regina, Assa.

SIR,—I have the honour to submit the following report on the season's operations on the Peace River road:

On the 16th March, 1899, I received instructions from you to engage a party of twenty men (all of whom were to sign an agreement), purchase necessary horses, engage waggons and make arrangements for the summer work; the supplies for the party being at Saulteaux Creek and Lesser Slave Lake in equal quantities. Reports of deep snow having come in I did not leave Edmonton until the 14th April.

The first work was done at the crossing of the Riviere Qui Barre. While there a heavy snow storm came on, and as the horses had to be tied out without shelter nearly all of them caught cold; the roads became almost impassable and progress was consequently very slow. It had been my intention to push on to the neighbourhood of Saulteaux Creek as fast as possible so as to get to work in the muskegs and haul out timber for corduroying and bridge building before the frost was out of the ground, leaving the work on this side to be done on the return journey, but on arriving at Pembina the stock was so used up by sickness and heavy roads that I decided to commence the work of permanent improvement at once.

From the Pembina, therefore, the work of taking out stumps, widening the road, putting in bridges and corduroying, and generally improving the road was proceeded with. It being necessary to give the horses as much freedom as possible in order to keep them warm, they were often allowed to run loose. As a result one team got away on the 22nd of April, and, although diligent search was made and a reward offered for their recovery, I did not regain possession of them until the 21st of June. At Twin Creeks, about midway between the Pembina and Athabasca Rivers, I was obliged to leave a team of horses and a team of mules in charge of two men, the animals being too sick to continue the journey. With the two remaining teams I pushed forward to the Athabasca River, which was reached on the 29th of April. During the whole of the season the camp was kept up to the party so that work was not delayed by a shortage of horses, but those that were able to work were kept thin by having too

much to do. On the last named date one of the mules at Twin Creeks died, and the other animals left there were brought in. As the frost was not out of the ground no draining could be done, and although a lot of corduroy was laid there still remains six miles of road between the Pembina and the Athabasca Rivers that will be bad in places during spring and wet weather until the road is properly drained. On the 30th of April and 11th May there were heavy snow storms accompanied by extreme cold, which seriously affected the health of both men and horses.

At the Athabasca River it was found necessary to put in a bridge on the south side to replace one that had been put in the winter before but had been carried away; another from the island to the mainland owing to the ferry having been removed, and a small one on the mainland, to connect the new trail with the old. As it was probable that the first mentioned bridge would be covered by backwater if the river rose very much, it was built on log abutments and had all the ties and other timbers securely pinned. This bridge has 60 feet of covering, all of which had to be made as no planking could be obtained at any place along the road. The bridge from the island to the mainland has a covering of 116 feet, the distance between the banks being 96 feet. It is built in four spans, having three trestles. It is 14 inches above the banks, and as the mouth of the channel is jammed with a quantity of drift wood that has held for several years, and prevented other drift wood going down, the bents in the centre will be safe unless an extraordinary rise in the water takes place. The smaller bridge has 28 feet of covering. There was also about half a mile of new road to be cut out and grubbed. The time taken in doing the whole of the work at the Athabasca was six days. A queen truss bridge of 40 feet span, with log abutments, was put over Deep Creek, the tie rods having been brought from Edmonton. The abutments required a great deal of earth filling and it took half the party six days to accomplish this work, the remainder of the party being engaged in removing stumps and fixing the road through a piece of heavy spruce timber for about 12 miles. The 100 pounds of dynamite that I had with me was nearly all used here. From Deep Creek to the Little Vermillion Creek, 129 miles from Edmonton, the ordinary work of stumping, corduroying, putting in culverts and draining, where possible, was done. We also did some grading, but until June there was always too much frost in the ground to make the ditches deep enough, and the grades were not completed.

While camping at the little Vermillion, the Commissioner of Public Works, Mr. James H. Ross, passed. He made an inspection of the road, and was accompanied by Mr. McCauley, M.L.A. I heard, when at Slave Lake later, that they had made the trip from Edmonton to Lesser Slave Lake in six and a half days, notwithstanding the fact that there were a couple of heavy rain storms while they were on the road. Up to this point there is no difficulty in getting grass and water along the road, and there are places which would serve for stopping houses where plenty of hay could be procured. Except for about nine miles of sand hills immediately north of the Athabasca, the soil is good and the country timbered with spruce, poplar, tamarac and birch. For four miles, through heavy spruce timber south of Deep Creek, the road requires ditching for drainage, and is soft in wet weather.

From the Little Vermillion to the foot of the Swan Hills, a distance of 20 miles, the surface of the country is wash gravel from four to twelve inches deep with a subsoil of a mixture of clay and quicksand. The coun-



try lies in ridges with low ground between them. Where it is necessary to cross from one to another with the road, which happens very frequently, either corduroying or grading was necessary. About six miles of this part, being gravel, looked in winter when the road was cut out as though it would be good, but upon examination it proved to be very bad and I saw that it would take more time to put it in good condition than it would to cut a new road. I therefore cut a new road, parallel to the old one, where drainage was better. This portion of the road is now in good condition, but it took a month to make it so.

I had hoped that by the time the supplies at Saulteaux Creek were used there would be freighters along the road with supplies for Lesser Slave Lake, and that I would be able to exchange with them the supplies I had at Lesser Slave Lake and thus save freighting them back, but as none had come up to the 28th of June it became necessary to get some from Lesser Slave Lake. It had rained continuously for thirty six hours before I left the camp, and although the work was being delayed I did not think the position sufficiently serious to discontinue the work. As the appropriation would only keep us at work for another month I did not need all the supplies that were at Lesser Slave Lake and decided to go there with a team and teamster, bring back what I could, arrange to have the rest brought out and dispose of the balance. I started from Saulteaux Creek on the 28th of June.

An idea of the rainfall may be gathered from the fact that the Swan River, which I had never seen more than 12 to 14 inches deep before, was in such flood that the horses had to swim across the main channel, and I could see by the banks that the water was about three feet lower than it had been. Several bridges had been damaged and I was obliged to renew one in order to get over. I engaged a man at Lesser Slave Lake to return with me and repair the others. On returning to camp on Saulteaux Creek on the 9th July I was presented with a petition signed by the men asking me to allow them their time for wet weather. As before leaving Edmonton each man had signed an agreement in which it was specified that they were not to be paid for time lost owing to bad weather I did not—although I sympathised with them in their sufferings through getting wet every day—feel justified in promising what they asked. I found there had been much more rain on the east side of the Swan Hills than on the other side, it having rained every day since I left camp.

I saw that I was not going to be able, with the appropriation, to complete the work as far as Swan River, where the Commissioner expected it would be done this season, owing to the way the work was delayed by rain and wet ground, and I therefore concluded to comply with the petition of the men, as they stated their willingness to stop work and return to Edmonton.

The road over the Swan Hills, for 20 miles, is very stumpy and I would recommend that it be improved this fall, if it is at all possible, as a monthly mail service is to be run over it. I would also suggest that the fall or early winter is the proper time to do the work as, until June, there is so much frost in the ground that it necessitates an unnecessary expenditure of force to remove the stumps. I found the action of dynamite was so sudden that in many cases, especially where there was frost, it smashed the stumps instead of raising them out of the ground. I had read of Judson's stump powder, and thought it would be more satisfactory and cheaper than dynamite, but was unable to get any. Since my return I find that it

can be procured at a low rate, and will, I feel certain, effect a great saving of time if used.

On reaching Lesser Slave Lake I found a letter from the Commissioner instructing me to go over the road from Swan River to Lesser Slave Lake for the purpose of being able to give an estimate for the necessary improvements upon it. I am now prepared to give that estimate.

There were constructed during the summer 20 bridges with 938 feet of covering, 110 culverts and 6,550 feet of corduroy put in.

I have, etc.,

T. W. CHALMERS, D.L.S.

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INNISFAIL, Alberta, Oct. 31st, 1899.

J. S. DENNIS, Esq.

Deputy Commissioner of Public Works,  
Regina, Assa.

SIR,—I have the honour to submit the following report of my operations this season in opening a waggon road and bridging streams between Peace River Landing and St. John's on the north side of Peace River:

My instructions, dated March 16th, 1899, required me to leave Edmonton for the north as soon as possible after April 1st. I arrived at Edmonton on the 3rd of April and purchased the necessary outfit and engaged men.

On April 11th we got into camp and left for the north the next day, picking up eight horses which I had left the previous year at Carrot Creek to be put through the winter. I now had 18 horses. Feed being scarce we were compelled to travel rather slowly. We crossed the Athabasca river on the ice, a not altogether safe proceeding. By means of a raft, on April 17th, we got the outfit over the Swan River on the Campbell trail. I thought it best to take that route as the feed was better than by the other route. At Lesser Slave Lake, owing to deep snow drifts along the shore, we had to travel on the ice. This, being somewhat slippery, was hard on the horses which were unshod. Thinking that the ice near the upper end of the lake might be unsafe we again took to the shore and made our way through the drifts to the ferry at the Narrows, where we arrived on the 2nd of May and found the ice running and the scow hauled out of the water awaiting repairs. Assisted by some of our party, Mr. Picard repaired the scow while others of the men stretched the cable. After some delay we crossed the river, and having replenished our stock of supplies, left for Peace River Landing, taking with us two carts and harness that I left at the Narrows last year. Peace River Landing was reached on May 11th.

The ice was running and piled up on shore. The horses being poor and weak, and as I was unable get a boat large enough to take them across, I concluded to let them rest a day before putting them in the water. Meantime I obtained a boat from the Hudson's Bay Co., took the supplies over and set the men to work collecting wood. As soon as we were ready to take the horses over two large fires were made on the bank of the river at a distance of twenty feet apart, and as the horses came out of the water



they were placed between the fires and kept there until warm. In this way we got all the horses across none the worse for their cold bath.

It was at this point that my work begun, although there was no heavy work to do until we reached a point north of Dunvegan, about 55 miles west of Peace River Landing. However, I had some work done on the hill near the Landing and built a bridge over Burnt Creek, 35 miles from that point, or 40 miles from Peace River Landing. I left the old Dunvegan trail and ran the road in a north-westerly direction across the country until I struck the Dunvegan and St. John's trail near Grassy lake, putting up finger boards on each fork. Three miles further on from the lake, which is about 55 miles from the Landing, we built a bridge over Muddy Creek. I instructed freighters Worsley and Beringer to bring to this point supplies that were to be sent to Dunvegan for me, as it was handier for them and suited my purpose better. From here we could not take all the supplies at one trip, and had to send back for what was left, but as we could not make long moves in consequence of having to bridge several streams and cut through thick timber, when we arrived at what is known as Buffalo Head Creek, about 87 miles from Peace River Landing, Worsley and Beringer overtook us with the supplies that were to be sent up to St. John's. When at Lesser Slave Lake I told Mr. Picard that—in case he sent the St. John's supplies by trail, as he spoke of doing, and it came along about the time I branched off with the pack trail which would be somewhere near the Big Muskeg—I would be able to lighten his teams by taking a lot of his load from him, or I might take it all between there and Pine River. Worsley said he was given to understand by Mr. Picard that when he overtook the party I would take the stuff from him. But I could not do this as I was still doubling back on the trail, and Worsley decided to cache what he had with him. Owing to heavy rains the streams were all full and he was afraid he would not be able to get the supplies through to St. John's. He told me he would arrange to have them reach the party about the latter end of June. The supplies came to hand on the 2nd of July as I was working across the Big Muskeg. I took about a thousand pounds weight of them, the remainder going forward to St. John's.

That same evening Mr. Commissioner Ross arrived in camp just in time for the Indian scare which was then exciting my party. The scare arose in this way: Some returning Klondikers told my men that the Indians were liable to give us trouble, and a man named Anderson, who camped with us on June 30th, also narrated a number of stories about the Indians (so the men said) which made them apprehensive of danger. The next morning, July 1st, all the men left camp to go to work and I went to round up the horses, some of them having followed Anderson's horses. When I returned about nine o'clock the men were all in camp. Upon enquiring as to the meaning of this they replied that the foreman, Cameron, would tell me as he had been appointed spokesman for them. I went to Cameron who told me they were afraid of the Indians and he thought they had a right to protect themselves. I reasoned with him and in the end he tried to persuade the men to return to work, but they refused. The next morning, Sunday, I was surprised to see Cameron and about half the party go out to work, the others remaining in camp, as they knew the Commissioner was coming to visit us that day. When the Commissioner came we talked the matter over with the men and the next day two more went to work. Still there were five men who would not stir, and Mr. Ross told me to pay them up to date and let them go. I did so and gave them provisions suffi-

cient to take them to St. John's. I sent word to the man in charge of the Hudson's Bay Co.'s post at that point to send me any men who might be out of work there. Two came. One of them cut his foot while building a smudge before joining the party. He stayed over a week in camp until he had so far recovered from the injury to his foot as to be able to ride a horse, when he started for the Landing. The other man stayed with us till we got through.

It took us longer to get through the Big Muskeg than I expected it would, owing to the large quantity of fallen timber wherever the ground was hard. However, we got around all the muskeg on good hard ground, except between thirty and forty chains which had to be corduroyed with poles and brush.

When the Commissioner was in camp it was arranged that I was to continue the waggon road to Pine River at least, instead of cutting out a pack trail to the Nelson River as I was first instructed to do. It was also decided that, if possible, I was to take a trip to the upper end of the Rocky Mountain Portage (Cust House) on the Peace River for the purpose of examining the feasibility of continuing the waggon road to that point. On August 2nd I therefore took one man with saddle horses and started on this trip, leaving the party in charge of the foreman about 12 miles east of Pine River. As there was no occasion to leave the pack trail (all being good ground the whole distance to Pine River) and no exploring had to be done for the waggon road, I thought it would be the best time to take the trip. We got to St. John's the same evening and crossed the Halfway River on August 4th. We there found one J. R. Peters, from Mattoon, Illinois, U.S.A. He told us that his partner had been drowned near where we crossed. We remained with him all the afternoon and helped him all we could. In answer to our enquiries he said he would stay and search for the body until we returned from Cust House, and it was arranged that if nobody else came along we would assist him out to St. John's. They had six horses with the packs and he was afraid of the river. We made Cust House on the evening of the 5th of August and had returned to Halfway River by noon of the seventh. We helped Peters through to St. John's and afterwards took some of his baggage on the raft to Peace River Landing.

After leaving Deep Creek the pack trail between St. John's and Hudson's Hope lies close alongside the river and runs through a beautiful country, but the trail is interrupted frequently by deep gullies which jut into the river. In consequence of this it would be very expensive to build a waggon road there. There are twelve gullies with more or less water running through them. Halfway River and Cash Creek are the largest streams. These gullies are from fifty to three hundred feet deep and only a short distance across. To make a road through them would mean the doing of a lot of side hill grading, but across the Twelve Mile Portage from Hudson's Hope to Cust House there would be no difficulty in getting a fair road. The distance from St. John's to Hudson's Hope is about 56 miles, and 68 to Cust House. We got back to St. John's on August 9th, and entered camp the next day five or six miles east of Pine River. The road was got through to Pine River on 15th August.

We cut the road to a width of about 20 feet all the way through, and every stream between Burnt River (35 miles west of Peace River Landing) and Pine River has been bridged with good substantial structures covered with poles and brush, except the Clearwater and Moose Rivers which re-



quire more expensive bridges than I felt warranted to build. We also filled with brush all places which we thought were too soft. On examining the Pine River hill I found that it will require much side hill work to grade a road. As we had no scrapers or plough I did not do any work upon it thinking it was too big a job to undertake with shovels. The river is very rapid and is troublesome to cross during high water. It and the Halfway River are similar streams.

The day following that upon which we arrived at Pine River I took some of the party over to St. John's to build a raft. We finished the raft on the 17th, when I started the whole party on the road with the exception of one man whom I retained to help me down the river with the raft. At the same time I instructed the foreman to do more work in the Big Muskeg, or wherever he thought it needed it along the road.

I got the Hudson's Bay Company to take 50 pounds of flour for their bill for storing the supplies, for which they charged four dollars. I also exchanged a little pack animal with Rev. Mr. Robertson for a good stout horse, giving him a piece of bacon weighing about twelve pounds to boot, as I was afraid that the little animal I had would not get through to Edmonton in good shape. After loading our raft with the surplus supplies, etc., we started down the river. I could not sell any of the supplies at Dunvegan but managed to sell all to Messrs. Brick Brothers and the Church of England Mission. Mr. David Curry, of the Mission, took \$29 worth, and Mr. A. Brick the balance for \$85.50, of which he paid me \$85.00, as we were unable to make the change for the 50 cents. As there were a few more supplies coming through with the party we decided to arrange it when the rest of the stuff came along. After waiting there for several days for the party, we missed them as they kept the outside road and reached the crossing on the evening of August 30th. I heard the same evening that they had gone down. We followed and got to the crossing with our raft early the next morning. We got the same Hudson's Bay Co. boat that we had in the spring and with it I got the outfit over the river. I gave Mr. Bedson (who is in charge of the Hudson's Bay Co's post at Peace River Landing) the raft. He charged me only two dollars for the use of the boat for both going up and coming back.

The rest of the supplies which Mr. Brick was to get I left at Worsley and Beringer's place for him and sent him a letter asking him to forward the money as soon as possible. As I had no means of weighing the supplies which I left I asked him to weigh them. We arrived at Lesser Slave Lake on September 6th, and I there sold two horses to Messrs. La Rue and Picard for \$93.00. From the Lake to Pembina river we found the road very bad.

On going north last spring I took three sacks of oats, about nine bushels, which Mr. Chalmers had stored at Saulteaux creek, and when coming back this fall I took about two and a half bushels and two hams, about 23 pounds. On getting to Edmonton I reported the matter to Mr. Chalmers. We arrived there on the 19th of September. I put the horses into a pasture and stored the remainder of the outfit with Messrs. McDougall & Secord. Upon receiving instructions from the Department to sell everything by public auction, Mr. Chalmers and I had our respective outfits sold on Saturday, 7th of October, my outfit realising \$594.00 net. Owing to inability to get a train until the following Tuesday, Oct. 10th, I arrived here that day.

Yours, etc.,

A. McFEE, D.L.S.

In connection with the work of the Surveys branch a schedule is appended showing the applications for permission to fence in and occupy road allowances or surveyed roads which were granted during the year.

APPLICATIONS GRANTED TO ENCLOSE ROAD ALLOWANCES DURING 1899.

44. John Copithorne.—On east boundary of south-east quarter sec. 6-25-4 w 5.
45. William Miller.—Surveyed road across the south-east corner of north-east quarter sec. 17-47-27 w 2.
46. Ludger Gareault.—Surveyed road across north-west quarter sec. 35-5-1 w 5.
48. F. W. Godsall.—On east boundary of Secs 10, 11, 14, 23 and south-east quarter Sec. 3, and on north boundary of Secs. 11, 12-7-1 w 5.
49. L. Bell.—On east boundary Sec. 1 and south half Sec. 12-6-1 w 5.
50. R. A. Ruttan.—Part of road on east boundary of lot 2 at Edmonton beginning at a point  $22\frac{1}{2}$  chains from the south boundary of river lot 2 and extending northerly 22 chains.
51. Cochrane Rancho Co.—On east boundary of Secs. 6, 13, 24 and south-east quarter Sec. 5-5-26 w 4.
52. W. F. Meyers.—On north boundary Sec. 7-45-21 w 2.
53. J. H. Long.—On east boundary of south-east quarter Sec. 31-54-24 w 4. Permission expired July 1st, 1899.
54. New Oxley Rancho Co.—On north boundary Secs. 20, 21, 22-6-25 w 4 between Kootenai and Belly rivers and on east boundary of Secs. 19, 20, 29 in same township.
55. Indian Agent, Belly river.—On south boundary of Indian reserve from north-west corner Sec. 10-3-25 w 4 eastward to St. Mary's River.
56. Mary Agnes Bunt.—On east boundary of south-east quarter Sec. 5-7-29 w 4.
57. Fred Whitlock.—Part of Moosomin and Moose Mountain road across north-west quarter Sec. 14 and south-west quarter Sec. 23-10-1 w 2.
58. Frank Levasseur & Dolphus Cyr.—On east boundary Sec. 12-6-30 w 4.
59. Howard & Gordon.—On east boundary of north-east quarter Sec. 27-23-1 w 5.
60. Geo. Levasseur.—On east boundary Sec. 27-23-1 w 5.
61. Donald McDougall.—On north boundary Sec. 22 and on east boundary of north-east quarter Sec. 22-21-19 w 2.
62. Mary McDougall.—On east boundary of south-east quarter Sec. 28 and north-east quarter of Sec. 21-19-2.
63. H. S. Lott.—On east boundary of south-east quarter Sec. 6-24-2 w 5.
64. Rev. J. S. Mahood.—Part of road allowance on west boundary of Sec. 4-47-27 w 2.
65. Francis Willock.—On east boundary of Secs. 16, 21-6-30 w 4.
66. Charles Smith.—On east boundary Sec. 2-6-1 w 5.
67. G. S. H. Lucas.—On east boundary of Secs. 4, 9-36-24 w 4.
68. Fred. Pelletier.—On east boundary of Sec. 18 and east half Sec. 17-6-29 w 4.
69. G. W. Gill.—On east boundary of south-east quarter Sec. 36-6-1 w 5.
70. John & Wm. F. Lawrence.—On east boundary of Secs. 34, 35, 36-10-27 w 3.
71. John Cowdry & G. A. Kennedy.—Lane between lots 28 and 33



facing respectively on 20th and 21st streets and west of 5th Avenue, Macleod.

72. Glengarry Rancho Co.—On east boundary of Secs. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 26, 27, 28, 29, 30 and north boundary of Secs. 7, 8, 9, 10, 11, 12, 19, 20, 21, 22, 23, 24-12-29 w 4; east boundary of Sec. 36-11-30 w 4.

73. D. A. Purdy.—Part of road allowance upon east boundary of Sec. 3-20-21 w 2.

74. S. Brooks.—Part of road allowance on east boundary of Sec. 33-5-1 w 5.

75. Martin Macleod.—Part of road allowance on east boundary of Sec. 28-6-1 w 5.

The system under which applications to fence in and occupy road allowances or surveyed roads are dealt with is fully set out in the report for last year. The regulations affecting this matter are found to work very well and we are able to deal promptly with applications as they are filed. In many portions of the Territories the ordinary road allowances are quite useless for road purposes owing to natural obstructions, or if passable are not yet required for public travel. In these cases it is often of great advantage to land owners, particularly in the ranching districts, to be able to obtain permission to fence in the road allowances or surveyed roads so that he may have his land in a block and save fencing. Prior to the adoption of the regulations regarding the closing of road allowances many complaints and disputes had arisen in cases where road allowances had been fenced and travel impeded. These cases have now been dealt with under the regulations and properly adjusted either by having the roads opened where needed for travel, or by the issue of authority to maintain fences enclosing them where the roads are not needed.

#### ENGINEERING BRANCH.

Staff ..... Assistant Chief Engineer.

The Engineering Branch of the Department is the branch through which all the work generally spoken of as "public works" is carried on. During the past year the undermentioned office work was performed by the Assistant Chief Engineer in connection with the season's operations of this branch:

Number of plans prepared, indexed and recorded .....	68
Number of specifications prepared, indexed and recorded....	68
Number of contracts let and proper contracts with accompanying plans and specifications prepared and recorded....	56

Under the present organisation the work of the branch is carried on with the assistance of the Assistant Chief Engineer at head quarters, and a staff of some 68 local inspectors resident in different portions of the Territories who are temporarily employed from time to time in superintending work during its progress, or inspecting it after completion.

The operations of this branch for convenience of reference are divided under the heads of "Maintenance and repairs of buildings," "Repairs to public works," "Construction of bridges," "Construction and maintenance of roads," "Maintenance of ferries," "Construction and maintenance of

fireguards," "Providing water supply," etc., and in referring to the work completed during the year these headings are followed.

#### MAINTENANCE AND REPAIR OF BUILDINGS.

In last year's report attention was directed to the poor character of the public buildings at Regina and the unsuitability of some of them for office purposes. During the year repairs were necessary to all the buildings and new heating furnaces had to be provided in both Departmental buildings, and additional underpinning provided under the more northerly of the two. The roof of the latter building, as well as that of the Legislative building, is now in a bad state of repair and will have to be attended to during the coming summer.

The overcrowded condition of many of the offices in the Departmental buildings, referred to in last year's report, has become more marked and pressing during the past year, and to provide proper space for Departmental records, and also for room and necessary air space for the staff will necessitate the consideration at an early date for a rearrangement of the offices and the providing of additional office room.

Attention is also directed to the fact that owing to want of vaults the total records of some of the departments would be lost were a fire to occur and the question of providing fire proof vaults at least for the northern building should receive consideration.

This Department is charged with providing and maintaining quarters for the Normal School classes. The arrangement with the Public School Trustees of Regina, under which rooms are provided for these classes at this point, was outlined in last year's report and by an extension of that arrangement, under which we finished the attic in the building within which our rooms are situated, we were fortunately able to provide the additional room required for Normal School purposes last year. The question, however, of providing a proper Normal School building is one that will have to be dealt with in the near future.

#### REPAIRS TO PUBLIC WORKS.

In all new countries, new, that is, in the sense of settlement and development, public works must necessarily be of a more or less temporary and perishable character, and even under normal conditions more or less in the way of repairs are required by these structures each year. Unfortunately the conditions in the Territories during the past year were of a very abnormal character, as has been explained in the opening pages of this report, and as a consequence the demands for the repair of bridges, dams, ferries, etc., were much beyond expectations at the beginning of the year and entirely beyond our power to deal with financially. Every effort was made to put the more important bridges, dams and ferries in at least a temporary state of repair for the season's business, but in a large number of cases we were unable to take any steps towards repairing the damages caused by the unusual floods.

The charge upon each season's appropriation for public works for repair of existing works must necessarily be a large one and one which will increase in proportion to the number of new works erected each year. Unfortunately at the present time we have to deal with the repair of a number of the larger wooden bridges built in the earlier days of Territorial



development and which have now reached their age limit. Many of these bridges have been extensively repaired from year to year but the time has now come when further repairs must necessarily involve practical reconstruction.

As was explained in last year's report, we are endeavouring to reduce the future charge for repairs upon new structures by putting in, where possible, steel superstructures for bridges and using vitrified pipes for culverts and for sluiceways for dams. Structures of this kind are of course of a more permanent character than those erected under the old system but they are limited by their cost to important points only.

It is hoped that in the near future the Local Improvement Districts will be able to relieve us of the necessary repair of the smaller bridges, dams, etc., as that is a class of work which they are specially qualified to perform, and we would then be free to deal only with the larger structures which require considerable expenditure and technical oversight in completion of the repairs.

In connection with the annual repair of the large number of small dams constructed in Eastern Assiniboia for the improvement of the water supply it may be pointed out that these structures, which in the large majority of cases are simply poorly constructed earth embankments unprovided with any protection against the damaging effects of the wash of the waves, necessarily require constant care and repairs to keep them in anything like good condition, and the policy has therefore been adopted of selecting the most important dams in each district and putting each year a certain number of them in a thorough state of repair and properly provided with protection against erosion from water wash, and with vitrified clay sluice pipes so that the reservoirs may be properly sluiced out each year. In pursuance of this policy the dams at Regina, Indian Head, Wapella, Grenfell and Moosomin were put in a thorough state of repair during the past season.

#### CONSTRUCTION OF BRIDGES.

Sixty-one bridges were constructed during the past year, the details of their location and character of the structure being given in the following schedule:

##### *Schedule of bridges constructed in 1899,*

- Antler creek, Carnduff. Steel superstructure, Secs. 5, 6-3-32 w 1.
- Antler creek, Elmore. Steel superstructure Secs. 21, 22-1-31 w 1.
- Battle river. Steel superstructure, Secs. 33, 34-44-23 w 4.
- Belly river, Standoff. Steel superstructure, Tp. 6-25 w 4.
- Cascade river, Anthracite. Steel superstructure.
- Coulee, Lethbridge, Belly river trail. Wooden truss bridge, Sec. 1-9-22 w 4.
- Ducharme's creek. Wooden bridge (reconstruction), Sec. 16-43-16 w 3.
- Eagle creek, Battleford-Saskatoon road. Wooden truss bridge.
- Jackson's creek. Wooden bridge, Secs. 1, 2-9-30 w 1.
- Kootenai river at Standoff. Steel superstructure.
- Maple creek. Wooden truss bridge, Secs. 15, 16-11-26 w 3.
- Maple Creek village (Barracks road). Steel superstructure.
- Melfort creek. Wooden bridge, Secs. 19, 30-45-18 w 2.
- McLaughlin's creek. Wooden bridge, Sec. 36-18-29 w 4.
- Pipestone creek, St. Andrea. Wooden truss bridge, Secs. 29, 30-13-33 w 1.

- Pot Hole creek. Wooden truss bridge, Sec. 17-7-21 w 4.
- Qu'Appelle river north of Summerberry. Steel superstructure, Secs. 19, 24-18-8-9 w 2.
- Qu'Appelle river, Harmony colony. Steel superstructure, Sec. 2-18-31 w 1.
- Qu'Appelle river, Widow's Crossing. Steel superstructure, Sec. 32-17-31 w 1.
- Ross creek, Medicine Hat-Dunmore road. Steel superstructure (partly constructed in 1898), Sec. 28-12-5 w 4.
- Spring coulee. Wooden bridge, Sec. 29-4-23 w 4.
- Stony ravine. Wooden bridge, Secs. 10, 15-10-30 w 1.
- Sturgeon river, Wilson's crossing. Wooden truss bridge, Sec. 10-55-24 w 4.
- Sturgeon river, Prince Albert. Steel superstructure, Tp. 49-26 w 2.
- Tongue creek. Wooden truss bridge, Sec. 19-19-28 w 4.
- Wascana creek, Regina barracks. Wooden truss bridge, Secs. 22, 27-17-20 w 2.
- Whitesand river, Bull's crossing. Wooden truss bridge, Secs. 1, 6-26-3, 4 w 2.
- Willow creek. Steel superstructure, Sec. 28-9-26 w 4.
- Goosehunting creek. Wooden bridge, Sec. 30-44-20 w 2.
- Creek, Charnock bridge. Wooden bridge, Sec. 30-20-12 w 2.
- Fishing river. Wooden bridge, Sec. 7-45a-22 w 2.
- Rosebud creek. Wooden bridge, Secs. 16, 17-31-1 w 5.
- Grand Valley creek. Wooden bridge, Sec. 2-27-5 w 5.
- Little Bow river. Wooden bridge, Sec. 36-18-29 w 4.
- Watercourse near Booth's dam. Wooden bridge, Secs. 35, 36-18-13 w 2.
- Souris river at Glenewen. Wooden approaches, Secs. 1, 2-3-1 w 2.
- Branch of Cascade river, Banff-Anthracite trail. Wooden bridge.
- High Hill creek. Wooden bridge, Secs. 10, 15-18-23 w 2.
- Stony creek, Assiniboia. Wooden bridge, Secs. 14, 15-27-32 w 1.
- Stony creek, Assiniboia. Wooden bridge, Secs. 22, 23-27-32 w 1.
- Stony creek, Assiniboia. Wooden bridge, Secs. 34, 35-27-32 w 1.
- Whitesand river, Muth bridge. Additional span built, Tp. 27-5 w 2.
- Creek on road. Two small wooden bridges, between Secs. 35, 36-17-9 w 2.
- Boggy creek. Reconstructed wooden bridge, Secs. 31, 5-18, 19-20 w 2.
- Branch of Wascana creek. Wooden bridge, Secs. 27, 28-15-17 w 2.
- Whitesand river, Jenzen's bridge. Wooden bridge (rebuilt), Secs. 11, 12-27-4 w 2.
- Sturgeon river at St. Albert. Wooden bridge (mostly reconstructed).
- Sturgeon river, Cunningham bridge. Wooden bridge, Sec. 29-55-22 w 4.
- Bridge at Hobson's dam. Wooden bridge, Secs. 36, 1-16, 17-28 w 2.
- Little Pipestone, Randall's crossing. Wooden bridge, Secs. 19, 20-11-33 w 1.
- Coulee. Wooden bridge (reconstructed), Secs. 20, 21-17-7 w 2.
- Pahonan creek. Wooden bridge, Secs. 32, 28-46-22 w 2.
- Little Cut Arm creek. Wooden bridge (reconstructed), Secs. 27, 34-18-33 w 1.
- Ravine. Wooden bridge (material supplied by North-West Government, labour by Local Improvement District), Secs. 9, 10-13-33 w 1.
- Mac's creek, Sask. Three wooden bridges.



Creek on road from Lac la Biche to Buck lake and Athabasca Landing. Wooden bridge.

White Calf creek. Wooden bridge.

Thunder creek. Wooden bridge, Secs. 19, 30-17-28 w 2.

Ravine, branch of Pot Hole river. Wooden bridge, Sec. 17-7-21 w 4.

As will be noted from the foregoing schedule several of the bridges erected during the year were important structures and their design and erection required considerable thought and care.

In providing bridges over western mountain streams like the Kootenai, Bow, High and Cascade rivers many problems have to be solved that do not arise in bridging the larger prairie rivers. The mountain streams have all a shifting gravel bed and permanent foundations for bridge structures are therefore hard and expensive to obtain. The streams are also subject to sudden and violent freshets, and during some seasons these freshets force the ice out before it has had time to thaw or become decomposed by the sun and damage to bridge foundations naturally results.

It is gratifying to be able to report that although unusual and in some instances unprecedented, floods were experienced on nearly all the large Territorial streams last season, we did not lose any of our larger new bridges and in only one or two instances was serious damage done to the foundations of the structures. We cannot expect, however, to have such good luck every year, and in spite of care both in the design and construction of bridges on the mountain streams we are liable to lose even the largest of them during any season's freshets.

It will be noted from the schedule that thirteen bridges having steel superstructures were erected last year. The policy of putting up, as far as possible, bridges of this kind instead of structures entirely of wood was discussed in last year's report and our experience so far with composite wood and steel structures certainly confirms the contention therein advanced that these structures will prove the cheapest in the end.

#### CONSTRUCTION AND MAINTENANCE OF ROADS.

The construction and maintenance of roads is the most troublesome problem with which the Department has to deal. This difficulty is largely due to two causes. In the northern part of the Territories where the country is more or less timbered the trend of settlement has not yet become clearly enough established to determine what roads should be opened up as main highways and in the southern and more open portion, where it is possible in an ordinary season to travel in almost any direction, people object to going any considerable distance for the purpose of reaching a main road and as a consequence we are asked to provide a road for almost every settlement no matter what its size may be. Were it possible to lay down upon a map of the Territories what might be considered as the main highways of travel to and from market centres it would be a simple matter to make a careful inspection of these roads and to determine what was necessary to do to put them in a good state for traffic. Owing, however, to the conditions above mentioned our efforts during the past year, as well as those of each year since the organisation of the Department, have been largely wasted in doing what may be described as patch work on a large number of roads.

Throughout the Territories as a whole a season such as the last practically makes the best roads impassable and as a result the demands upon

the Department for the improvement of roads during the last season contemplated an expenditure of four or five times the amount which it was possible to devote to that object. Our system during the past two years has been to do as much of the work of improving roads as possible with road grading machines, but it will be understood that when lines of communication which have been quite feasible for travel during an ordinary season become obstructed, as they did last year, by an endless number of sloughs and swamps, and by many almost bottomless bog holes, an effort to improve these highways by grading with a road machine is practically wasted money.

In last year's report attention was directed to the fact that the question of good roads is one in which the farmers in the grain producing portion of the Territories are particularly interested. In the older provinces of the Dominion the subject of "good roads" is now probably the most important one with which local governments or municipal authorities have to deal and great efforts are being made to put the main lines of communication in such condition that heavy loads can be hauled at all times of the year without having to provide undue motive power. It may again be stated that the market roads in our grain producing area should certainly be put in such a condition that the grain crop can be marketed without the hardship which results from an attempt to transport it over poor highways, but the possibility of doing this with our present appropriation seems almost hopeless. In a country of such vast extent as the Territories, and one within which the settlement is so scattered, it can easily be understood that an effort to provide a good road to each point where there is an elevator, or in the ranching country to railway stations, must be a process of slow growth and that our efforts in that direction, for some years at least, must be of a tentative character.

It is proposed during the coming year to endeavour to carry out the system inaugurated last year of selecting certain of the more important roads in each district for improvement, but in carrying out this system great difficulty has been and will be experienced in obtaining unanimity of opinion in any district as to which is the more important road and the one most deserving of immediate attention.

#### MAINTENANCE OF FERRIES.

Nineteen ferries were operated in the Territories last year. The larger number of these ferries are located on the north and south branches of the Saskatchewan River where the unfordable character of the stream, even at low water, necessitates some means of communication between both banks.

The ferry across the Bow River at Blackfoot Crossing was established during the past year. This stream is not of a fordable nature and for a considerable period of the year the water is at that stage, and the current so rapid, that crossing even by means of a ferry is difficult.

The heavy floods which occurred on many of the streams, particularly on the North and South Saskatchewan River, during the past season seriously damaged many of our ferries and in fact put several of them out of operation. Among these was the steam ferry which has been operated for some years at Battleford, and I regret to state that the boat and machinery used in operating this ferry were totally wrecked by these floods. The river at Battleford is of such character that a cable ferry such as is operated at other points in the Territories cannot be used there,



and it would seem that the only chance of providing a crossing is to have a steam ferry. Ferries of this character are of course expensive to build and operate, particularly at points like Battleford where there is not a very large amount of ferriage to be done.

We introduced last year a reduction in the ferry charges on all the ferries in the Territories and operated them by payment of a small monthly bonus to the men in charge, the bonus being designed to make up the difference between the old schedule of fees and the reduced schedule. The system gave much public satisfaction as it materially reduced the cost to those persons who have occasion to use the ferries frequently, but payment of this bonus has of course entailed considerable expense upon the Department. However, it must be noted that the streams upon which we operate ferries are streams of that character upon which it is impossible to undertake the construction of bridges in the near future and the only method therefore of affording settlers who live on the opposite sides of these streams from market centres access to these centres is to provide and operate a ferry. With the extension of railway construction in the northern country the necessity for a number of the ferries now operated will of course cease, but until such time as this railway extension is completed we must look forward to the continued operation of all the ferries mentioned in the schedule below.

*Ferries existing and in operation during the year 1899.*

Edmonton-Peace River road, Athabasca river.  
 Blackfoot Crossing, Bow river.  
 Peace River road, Narrows of Lesser Slave Lake.  
 Battleford, North Saskatchewan river.  
 Carlton, North Saskatchewan river.  
 Fort Saskatchewan, North Saskatchewan river.  
 Lily Plain, North Saskatchewan river.  
 Lily Plain, North Saskatchewan river.  
 Victoria, North Saskatchewan river.  
 Wingard, North Saskatchewan river.  
 Edmonton-Peace River road, Pembina river.  
 Tindastoll, Red Deer river.  
 Adam's Crossing, South Saskatchewan river.  
 Batoche, South Saskatchewan river.  
 Fish creek, South Saskatchewan river.  
 Isbister's Crossing, South Saskatchewan river.  
 Medicine Hat, South Saskatchewan river.  
 McKenzie's Crossing, South Saskatchewan river.  
 Saskatoon, South Saskatchewan river.

CONSTRUCTION AND MAINTENANCE OF FIREGUARDS.

Owing to the unusually wet season throughout the Territories last year very little damage was caused by prairie fires, but this immunity from fires has brought with it an added danger should we have a dry season this year, the unwonted growth of grass last season making it probable that very extensive and serious fires will occur should the ensuing season be dry.

The necessity for fireguards is of course more apparent in the southern and south-western portions of the Territories where the settlement is scattered and ranching is the main industry. We have therefore made an effort to cope with this question by laying down upon a plan a definite system of main fireguards throughout the west, and during the past year we completed 376 miles of fireguards comprising this system.

During this and future years it is hoped that in the larger local improvement districts, more particularly referred to further on in this report, it will be possible to undertake the construction and maintenance of these fireguards as a charge against the taxes collected, that class of work being of more importance than almost any other to the people of the districts.

In the eastern part of the Territories we undertook the year before last to complete a main fireguard surrounding Moose Mountain, this work being done, as was explained in the report of last year, in conjunction with the Indian Department. We had hoped during the past year to complete this fireguard but were unable to get any satisfactory offers for the completion of the work under contract, or to get the settlers to undertake it in small sections as district work.

Attention is again directed to the fact that the larger percentage of fires, which during dry seasons devastate large portions of the country, are started from the railway lines and it is respectfully suggested that the time has come when by legislation, if other arrangements cannot be made, the railway companies should be forced to put in a more thorough system of fireguards along their lines than they now maintain. It is of course claimed by the railway companies that many of the fires attributed to sparks from their locomotives are started from other causes, but I think it can be conclusively shown that at least a large proportion of the worst fires are directly due to sparks from the engines operated on these railway lines.

#### PROVIDING WATER SUPPLY.

In many portions of the Territories the need of good water for domestic or stock watering purposes is one of the greatest drawbacks with which settlers have to contend. It is true that during unusually wet seasons surface water is found in many small ponds and swamps that are dry during the majority of years, and the want of water was therefore not so pressing in some districts last season. This supply is, however, not only precarious, but towards the end of the summer the water in these lakes and swamps becomes unfit for domestic use and during the winter this source of supply is cut off owing to the fact that most of these small bodies of water freeze to the bottom. In fact in many districts the want of water, at least for stock watering purposes, is really more pressing in winter than in summer, for during the latter season cattle and horses can be driven considerable distances to water but in winter this is not possible and the laborious system of melting snow has to be resorted to.

The water question is one of the most difficult and unsatisfactory with which we have to deal. Digging, boring or drilling for water, particularly in districts where the chances of obtaining water are known to be poor, is a system of underground exploration attended in most cases with most disappointing results. However, some of our best grain producing districts are those within which water is most difficult to obtain and an effort has to be made to correct this drawback by developing a water supply as part



of our public work. Three means of accomplishing this end are employed as follow:

First, We provide testing augers, which will bore to depths of from eighty to one hundred feet, for use by the farmers in endeavouring to locate a water supply on their farms which can be subsequently developed by digging.

Second, We create storage reservoirs upon streams or upon small water courses, which become dry during the summer, so as to store the melting snow or spring rains flowing through these channels until it is needed later in the season, and

Third, We use deep well drilling machines to provide public wells in districts where the first and second methods fail or are not applicable.

To carry out the first mentioned system 29 well testing augers are being operated. During the past year a change was made in the system of operating these augers. The old system was to provide a foreman who made tests for farmers, the latter providing power and assisting to operate the auger and boarding the foreman. That system proved unsatisfactory in many ways and last season we made a change by putting the auger in charge of a responsible person in each district who looks after keeping it in repair and allots it to the farmers desirous of using it, in the order of their application. The augers have done good service in several districts in locating water supplies but, as was to be expected, a large number of the tests failed to locate water. In one sense the use of these testing augers has proved disappointing and has led to the loss of much labour. It frequently happens that the auger tests locate water which promises a good supply, but this supply fails when the necessary well is dug and proves to be a small pocket only which soon becomes exhausted. To obviate this difficulty a pump which could be operated in the small bore made by the augers ought to be provided so that a test of the volume and quality of the supply might be made before finally proceeding with the digging of the well.

In many districts the tests made last year have only served to emphasise the fact, already suspected, that water cannot be obtained at reasonable depths, and that only by the use of deep well boring machinery can we hope to develop a supply.

A large sum of money has been spent in endeavouring to improve the water supply by the second method above referred to, and at the present time we have some three hundred dams in existence including structures which cost only a few dollars and others which cost large sums (the Regina dam has so far cost about \$9,000, and others from \$1,500 to \$3,500). There is no question that the water held in the reservoirs created by these dams has proved of the greatest value in some districts, particularly for stock watering purposes, but this method of correcting nature's shortcomings is attended with several drawbacks. The dams in a large majority of cases are mere earth embankments unprovided with proper protection against damage by the water and as a consequence they are hard to maintain, and if destroyed by the spring freshets cannot of course be rebuilt in time to conserve that season's flow of water in the channel on which they are located.

There is also the more serious drawback, dealt with in last year's report, that the large majority of these dams are unprovided with any means of flushing out the reservoir and as a consequence the accumulation of impurities during many seasons' use offers a serious menace to public health.

The effort which we are making to meet this drawback by providing low level sluiceways in the more important dams has already been referred to.

The third system referred to of trying to develop a water supply by putting down deep public wells is the system to which we are now devoting the most attention. During the past year five deep well boring machines were operated in making tests for these wells—one in Alberta, one in Saskatchewan and three in Assiniboia.

Unfortunately our last season's operations as a whole were not a success in the sense of locating many wells with a good water supply, the location and depths of the wells provided being shown in the following schedule :

*Public Wells provided in 1899.*

Medicine Hat (rebored), Sec. 15-11-26 w 3. (Maple Creek Village.) 260 feet.

Mitchell (cleaned and deepened), between south-east quarter Sec. 33 and south-west quarter Sec. 34-42-5 w 3. 98 feet.

Mitchell, between south-east quarter Sec. 4-43a and north-east quarter Sec. 33-42-4 w 3. 51 feet.

Mitchell, between north-west quarter Sec. 36-42 and north-west quarter Sec. 1-43a-4 w 3. 86 feet.

North Regina, between south-west quarter Sec. 31-19-7 w 2 and south-east quarter Sec. 36-19-18 w 2. 77½ feet.

East Calgary, north-east quarter Sec. 13-22-23 w 4. 125 feet.

East Calgary, between south-east quarter Sec. 20 and south-west quarter Sec. 21-23-28 w 4. 40 feet.

East Calgary, between south-west quarter Sec. 18 and south-east quarter Sec. 13-23-28 w 4. 60 feet.

Mitchell, between south-west quarter Sec. 5-41 and north-west quarter Sec. 32-40-4 w 3. 185 feet.

Moose Jaw, between north-west quarter Sec. 10 and south-west quarter Sec. 15-18-24 w 2. 164 feet.

Mitchell, between north-east quarter Sec. 6 and north-west quarter Sec. 5-44-4 w 3. 123 feet.

East Calgary, between north-east quarter Sec. 16 and north-west quarter Sec. 15-22-29 w 3. 120 feet.

North Regina, between north-east quarter Sec. 8 and north-west quarter Sec. 9-19-18 w 2. 200 feet.

LOCAL IMPROVEMENT BRANCH.

Staff { Clerk in charge.  
{ 1 temporary typewriter clerk.

The Local Improvement Branch is charged with the administration of the Local Improvement and Village Ordinances and is the branch of the Department dealing with improvement work performed each year by the people themselves as distinguished from the work performed as public work by the Department.

It may, I think, be fairly claimed that the rural population of the Territories is now doing its share towards what may be termed work of local improvement, and this condition is the more gratifying in view of the generally expressed opinion at the time of the introduction of the compul-



sory clauses in The Local Improvement Ordinance that the settlers in the Territories would make little or no effort to comply with the provisions of the Ordinance.

The growth of the organisations through which the settlers may be said to help themselves in improving roads is so marked that it is well to give here the information regarding these districts from the inception of the local improvement law.

*Schedule of Local Improvement Districts.*

Districts organised (voluntary) in 1890 .....	1
“ “ “ “ 1893 .....	2
“ “ “ “ 1894 .....	19
“ “ “ “ 1895 .....	20
“ “ “ “ 1896 .....	15
“ “ (compulsory) “ 1897 .....	181
“ “ “ “ 1898 .....	178
“ “ “ “ 1899 .....	32
	<hr/> 448
Districts disorganised for various causes .....	21
	<hr/>
Number of Districts now in operation .....	427

*List of Local Improvement Districts with description of and name of Overseer.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Principal Meridian.			
Range 30			
Tp 1.....	R. H. Henderson.....	Gainsborough, Assa.....	152
2.....	Simpson Shaw.....	do.....	156
3.....	Gavin Law.....	do.....	150
9.....	William Stephen.....	Heron, Assa.....	158
11.....	Kenneth Corbett.....	Fleming, Assa.....	163
10.....	William Stableford.....	Lippentott, Man.....	172
12.....	Henry Davis.....	Fleming, Assa.....	295
13.....	Robert Vance.....	do.....	296
14.....	John Mullen.....	Moosomin, Assa.....	298
15.....	Joseph James.....	Welwyn, “.....	299
16.....	Harry Bayless.....	do “.....	297
17.....	.....	.....	300
19 Secs 6, 7 and 18 only.....	Franklyn Parrin.....	Spy Hill, “.....	417
22.....	Peter McFadyen.....	Langenburg “.....	135
23.....	Philip Popp.....	do “.....	133
Range 31			
Tp 1.....	Jacob G. Burke.....	Elmore, “.....	142
2.....	Leslie Wright.....	Gainsborough, Assa.....	160
3.....	William J. Miller.....	Carievale, “.....	144
11.....	Robert Percy.....	Fairlight, “.....	175
12.....	A. W. McClure.....	Moosomin, “.....	302
13.....	Thomas Wains.....	do.....	303
14.....	R. J. Phin.....	do “.....	304

*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Principal Mer.— <i>Con.</i>			
Range 31— <i>Continued.</i>			
15.....	Malcolm McNeil.....	Moosomin, Assa.....	305
16.....	Robert Webster.....	Hillburn, ".....	306
17.....	James Murphy.....	Rocanville, ".....	307
18.....	John A. Brown.....	Spy Hill, ".....	308
19.....	Franklyn Perrin.....	do ".....	417
21.....	Fr. Hildebrandt.....	Langenburg, ".....	79
22.....	Christian Fieseler.....	do ".....	88
23.....	Adolphe Backer.....	do ".....	134
25.....	Caspar Radgiber.....	Logberg, ".....	411
Range 32			
Tp 1.....	J. W. Harris.....	Workman, ".....	161
2.....	Thomas Wilson.....	Carnduff, ".....	167
3.....	W. J. Foster.....	Carievale, ".....	157
11.....	George Faulkner.....	Rossetti, ".....	18
12.....	Madison F. Fry.....	Valley, ".....	191
13.....	Harry Holmes.....	Moosomin, ".....	309
14.....	Roderick McCormick.....	Arrochar, ".....	310
15.....	George L. Martin.....	Wapella, ".....	311
16.....	Joseph Goodman.....	Hillburn, ".....	312
17 East two tiers of Sections only.....	James Murphy.....	Rocanville, ".....	307
17 except two east tiers of Sections.....	Alexander McRae.....	Carnoustie, ".....	313
18.....	James Ormiston.....	Dongola, ".....	314
19.....	John Salkeld.....	do ".....	448
20.....	Archibald Park.....	Redpath ".....	86
21.....	George Neumeier.....	Langenburg, ".....	94
22.....	Henry Roberts.....	Churchbridge ".....	143
23.....	J. Heinrickson.....	do ".....	132
24.....	J. Einarrsson.....	Logberg, ".....	82
Range 33			
Tp 2.....	James Sproat.....	Carnduff, ".....	149
3.....	George Melton.....	do ".....	154
4.....	Allan O. Pringle.....	do ".....	182
11.....	William Ramage.....	Wawota, ".....	166
12.....	A. H. Salmon.....	Riga, ".....	315
13.....	Donald McKinnon.....	Earlswood, ".....	316
14.....	Colin Campbell.....	Wapella, ".....	317
15.....	Archibald Hare.....	do ".....	318
16.....	Benjamin Wainman.....	do ".....	319
17.....	Charles Bond.....	Carnoustie, ".....	320
18.....	William M. Gordon.....	Hazel Cliffe, ".....	321
19.....	John Salkeld.....	Dongola, ".....	448
21.....	William Rowland.....	Riversdale, ".....	96
Range 34			
Tp 1.....	James Porter.....	Bosecurvis, ".....	176
2 Fr.....	James Sproat.....	Carnduff, ".....	149
3 Fr.....	George Melton.....	do ".....	154
4 Fr.....	Allan O. Pringle.....	do ".....	182
8 Fr.....	Philip Cooke.....	Cannington Manor, Assa.....	452
9 Fr.....	George D. Dickin.....	Cannington Manor, Assa.....	182



*List of Local Improvement Disiricts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Principal Mer.— <i>Con.</i>			
Range 34— <i>Continued</i>			
10 Fr. ....	Thomas Weatherald..	Glen Adelaide, Assac....	173
11 Fr. ....	William Ramage.....	Wawota, " ....	166
12 Fr. ....	A. H. Salmon.....	Riga, " ....	315
13 Fr. ....	Donald McKinnon....	Earlswood, " ....	316
14 Fr. ....	Donald Black.....	Wapella, " ....	317
West Second Meridian.			
Range 1			
Tp 1.....	James Porter.....	Boscurvis, Assa.....	176
2.....	Thomas G. Willard ...	Glen Ewen, Assa.....	162
3.....	James McIntosh.....	Oxbow, Assa.....	164
4.....	Murdoch McMurchy..	Oxbow, " ....	153
8.....	Philip Cooke.....	Cannington Manor, Assa.	452
9.....	George D. Dickin....	do do " ....	184
10.....	Thomas Weatherald..	Glen Adelaide, Assa.....	173
11.....	John A. McPherson...	Wawota, " ....	271
12.....	J. B. Powell.....	Kissina, " ....	130
13.....	John Kidd.....	Fairmede, " ....	128
14.....	John McDonald.....	Benbecula, " ....	137
15.....	W. Tudge, Senr.....	Wapella, " ....	440
16.....	William Elliott.....	do " ....	120
17.....	W. R. Carson.....	Whitewood, " ....	123
18.....	Matthew Daniel.....	Forest Farm, " ....	124
19, 19a, and 20 South of Little Cut Arm Creek.....	Stephen Barath.....	Kaposvar, " ....	105
19 and 20 North of Little Cut Arm Creek.....	Chas. H. Leftwich....	Kaposvar, " ....	99
21.....	Frederick I. Basken..	Kinbrae, " ....	136
22.....	Robert Bird.....	Clumber, " ....	6
23.....	C. W. C. Saunders....	Saltcoats, " ....	8
24.....	Ernest Cass.....	do " ....	5
25.....	Thomas Jowsey.....	do " ....	10
Range 2			
Tp 1.....	W. Galloway.....	Boscurvis, " ....	168
2.....	Thomas H. Gregson...	Oxbow, " ....	268
3.....	Jacob Hutchinson....	do " ....	145
4.....	Thos. Dickson.....	do " ....	141
8 and 9.....	John Rutherford.....	Cannington Manor, Assa.	178
10 Sections 1, 24, 25, 26, 34, 35 and 36 only.....	Thomas Weatherald..	Glen Adelaide, Assa.....	173
13.....	John Dickey.....	Poplar Grove, " ....	147
14.....	Theodore James.....	Whitewood, " ....	114
15.....	W. A. Mann.....	do " ....	129
16.....	P. M. Gillis.....	do " ....	113
17.....	L. Robertson.....	do " ....	100
18.....	J. P. Noydin.....	Ohlen, " ....	103
19, 20, and 19a, South of Little Cut Arm Creek.....	Alex. Stenberg.....	Ohlen, " ....	104
22.....	Thos. A. Wiley.....	Perley, " ....	16
23.....	J. W. McGregor.....	Saltcoats, " ....	9
24.....	D. McKillop.....	do " ....	7
25.....	John Jowsey.....	do " ....	84
28.....	Charles H. Lakey.....	Mulock, " ....	453

*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Second Mer.— <i>Con.</i>			
Range 3			
Tp 3 <sup>*</sup> .....	James R. Trumppour ..	Alameda, " .....	148
4.....	John O. Truscott .....	do " .....	155
6.....	Jeremiah Coffey .....	Dalesboro, " .....	151
7.....	E. Richardson .....	Carlyle, " .....	250
8 and 9.....	Hugh Kippen .....	Arcola, " .....	186
11.....	D. M. Murray .....	High View " .....	165
13.....	Alfred Law .....	Montgomery, " .....	395
14.....	John Dovell .....	Whitewood, " .....	119
15.....	Stephen A. Hall .....	do " .....	112
16.....	John King .....	do " .....	98
18, 19 and 19a N. and E. of Round Lake.....	Nils Dahl .....	Ohlen, " .....	394
North ½ 22, and Tp 23.....	Robert Maddaford .....	Crescent Lake, " .....	11
24.....	William S. Outhwaite.....	Yorkton, " .....	420
25.....	Charles Peaker .....	do " .....	127
26.....	Charles Beck .....	do " .....	89
27.....	Adolph Milbrant .....	Ebenezer, " .....	252
28.....	Gottlieb Battke .....	do " .....	410
29 W. ½ only .....	John Tetlock .....	Tetlock, " .....	447
Range 4			
Tp 3 and S. ½ Tp 4 .....	John B. Ewen .....	Alameda, " .....	384
7.....	W. R. Jefferson .....	Clare, " .....	180
8.....	Willard Scarrow .....	Arcola, " .....	270
11.....	J. E. Henry .....	Fletwode, " .....	183
13.....	.....	.....	292
14.....	J. F. Cunningham .....	Fitzmaurice, " .....	146
16.....	Sam. H. Field .....	Broadview, " .....	115
Fr 18, S. ½ 19 and Fr 19a .....	Thomas Bawdon .....	Cotham, " .....	244
22, except Sections 1, 2, 3, 4, 5, 6, 10, 11 and 12 and Tp 23.....	Thomas W. Magrath .....	Crescent Lake, " .....	4
24.....	Anthony Czarnowsky .....	Yorkton, " .....	371
25.....	Malcolm Lang .....	do " .....	170
26.....	E. A. Healey .....	do " .....	3
27.....	Adolph Milbrant .....	Ebenezer, " .....	252
28.....	Kristjan Hoehn .....	do " .....	251
29.....	John Tetlock .....	Tetlock, " .....	447
Range 5			
Tp 1.....	W. H. Dorsey .....	North Portal, Assa. ....	365
7.....	.....	.....	284
8 and 9.....	W. B. Empey .....	Percy, " .....	238
15.....	Wm. Evans .....	Broadview, " .....	116
16.....	Wilfred Wilde .....	do " .....	364
Fr 18, S. ½ 19, and Fr 19a .....	Thomas Bawdon .....	Cotham, " .....	244
North two tiers of Sections in Tp 23 and Tp 24 (all).....	John Kovacz, Junr .....	Yorkton, " .....	378
25.....	Robert Roussay .....	do " .....	428
26.....	Gilbert Stainger .....	do " .....	253
27.....	John Keilo .....	do " .....	174
28 and S. ½ 29 .....	Henry W. Cooper .....	Whitesand, " .....	254
North half of Tp 29.....	John Tetlock .....	Tetlock, " .....	447
Range 6			
Tp 1.....	Samuel Frayn .....	Coalfields, " .....	185

*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Second Mer.— <i>Con.</i>			
Range 6— <i>Continued.</i>			
7.....	Henry McCartney .....	Coteau, Assa.....	188
8 and 9.....	George Hall .....	Percy, ".....	181
15.....	Albert Dash.....	Broadview, ".....	102
16.....	Jacob Croll.....	do ".....	101
Sections 25, 26, 27, 34, 35 and 36 in Tp 23 and E. ½ Tp 24	John Kovacz, Junr ...	Yorkton, ".....	378
25 West half only .....	James Malcolm, Senr..	do ".....	427
25 East half only .....	Robert Roussay .....	do ".....	428
26 East half only .....	Gilbert Stainger.....	do ".....	253
26 West half only.....	Ed. Fred. Everest ....	Theodore, ".....	380
27 and Secs. 3, 4, 5, 6, 7, 8, 9, 10, 15, 16, 17 and 18 in Tp 28..	George Fernie .....	Theodore, ".....	171
28 Two east tiers of Secs. only	Henry W. Cooper ....	Whitesand, ".....	254
28 Secs. 19, 20, 21, 22, 27, 28, 29, 30, 31, 32, 33, and 34 only ..	A. C. Tracy.....	Theodore, ".....	368
29 Secs. 5, 6, 7, 8, 17, 18, 19, 20, 29, 30, 31 and 32 only—			
30 Secs. 5, 6, 7 and 8 only.....	C. T. Hayes .....	Theodore, ".....	369
Range 7			
Tp 8.....	Lucien Gavroy .....	Alma, ".....	177
15.....	Philip Leech .....	Grenfell, ".....	61
16.....	T. W. Wright.....	do ".....	62
17.....	Angus McPherson.....	do ".....	75
18.....	G. D. Fitzgerald .....	do ".....	60
19 and 19a, portions south of river .....	Norman McLeod .....	Hyde, ".....	388
20.....	Martin Hehn .....	do ".....	93
19 portion north of river. ....	John Gravy .....	do ".....	389
25.....	James Malcolm, Senr..	Yorkton, ".....	427
26. E. ½ and Secs. 4, 5, 8 and 9 only .....	Ed. Fred. Everest ....	Theodore, ".....	380
27.....	William W. Spencer ..	do ".....	379
28.....	A. C. Tracy .....	do ".....	368
29 and two south tiers of Secs. in Tp 30 .....	C. T. Hayes .....	Theodore, ".....	369
Range 8			
Tp 2.....	W. J. Hobbs.....	Estevan ".....	140
15.....			345
16.....	James S. McDonell...	Grenfell ".....	346
17.....	James McCowan.....	Summerberry ".....	347
18, 19 and 19a, South of Qu' Appelle River .....	James Brown.....	Ellisboro ".....	348
18, 19 and 19a, North of Qu' Qu'Appelle River.....	Alex. Campbell.....	Tiree ".....	349
20.....	Fred. Tressel.....	Neudorf ".....	80
21.....	John Matthews.....	Pheasant Forks, Assa	78
25 Secs. 25, 26, 35 and 36 only	James Malcolm, Senr..	Yorkton, Assa .....	427
28 Secs. 1, 2, 3, 4, 5, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 20, 21, 22, 23, 24, 25, 26, 27 and 28 only .....	A. C. Tracy.....	Theodore, Assa .....	368
28 Secs. 31, 32, 33, 34, 35 and 36 only;			



*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Second Mer.— <i>Con.</i>			
Range 8— <i>Continued.</i>			
29 and two south tiers of Secs. in Tp. 30.....	James Prowse.....	Theodore, Assa.....	370
Range 9			
Tp 15.....	Adam Johnston.....	Moffat, Assa.....	350
16.....	W. J. Fleming.....	Adair, ".....	351
17.....	W. P. Osler.....	Wolseley, Assa.....	352
18 and 19a.....	Geo. P. Campbell.....	Ellisboro ".....	353
19.....	J. B. Hermiston.....	" ".....	354
20.....	Charles Stuart.....	Pheasant Forks, Assa.....	76
21.....	Luther Brown.....	" " ".....	72
29 Two east tiers only—			
30 Secs. 1, 2, 11 and 12 only..	James Prowse.....	Theodore, Assa.....	370
Range 10			
Tp 15.....	James Pollock.....	Moffat, Assa.....	355
16.....	George E. Cole.....	Wolseley, Assa.....	356
17.....	Frank Gates.....	" ".....	357
18 portion south of River.....	David Sexsmith.....	Ellisboro, Assa.....	358
18 19a, and 19 north of River.	James Balfour, Senr..	Hill Farm, ".....	359
20.....	John Stueck.....	Chickney, ".....	64
21.....	H. M. Aldous.....	Lorlie, ".....	74
Range 11			
Tp 20.....	J. Morrison.....	Abernethy, Assa.....	19
21.....	E. W. Webster.....	Balcarres, ".....	330
Range 12			
Tps 1 to 13 inclusive, Weyburn Large District No. 518			
20.....	Charles Stephens.....	Saltoun, Assa.....	27
21.....	Joseph Shore.....	Fort Qu'Appelle, Assa...	190
Range 13			
Tps 1 to 13 inclusive, Weyburn Large District No. 518,....			
20 and that portion south of River and Lake of Tp 21,...	Hugh L. Cargo.....	Fort Qu'Appelle, Assa ..	398
21 portion north of River and Lake.....	Thomas Redmond .....	" " ".....	426
22 Secs. 31, 32, 33 and 34 only—			
23 Four west tiers of Secs. only	William Hayes.....	Hayward, Assa.....	456
Range 14			
Tp 1 to 13 inclusive, Weyburn Large District			*
20.....	Cyrus Booth.....	Fort Qu'Appelle, Assa ..	397
21, south of river and lake and including H. B. Reserve...	Alfred Dunsby.....	Fort Qu'Appelle, " ..	399
22 Sections 35 and 36 only—			
23 Two east tiers of Secs. only	William Hayes.....	Hayward, " ..	456

*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Second Mer.— <i>Con.</i>			
Range 15			
Tps 1 to 13 inclusive, Weyburn Large District			
Range 16			
Tps 1 to 13 inclusive, Weyburn Large District			
Range 17			
Tps 5 to 13 inclusive, Weyburn Large District			
15.....	Henry Eutenier.....	Kronau, Assa.....	65
16.....	Jacob Hicks.....	Hicksvale, Assa.....	85
17.....	J. A. McGirr.....	Balgonie, ".....	87
18.....	Martin Karst.....	do ".....	133
19 and 20.....	James Cameron.....	Edenwald, ".....	50
Range 18			
Tp 16.....	William Clancy.....	Regina, ".....	131
17.....	Samuel Gilbert.....	do ".....	70
18.....	W. J. German.....	do ".....	122
19.....	William White.....	do ".....	49
44.....	S. B. Maxwell.....	Melfort, Sask.....	117
45 Secs. 3, 4, 5, 6, 7, 8, 9, 10, 15, 16, 17, 18, 19, 20, 21, 22, 23, 26, 27, 28, 29, 30 only.....	Peter Aikenhead.....	Melfort, Sask.....	386
Range 19			
Tp 16.....	Philip Nickalls.....	Regina, Assa.....	421
17.....			413
18.....	Charles Simpson.....	Regina, Assa.....	107
19.....	Andrew Ormiston.....	do ".....	108
21.....	Robert Mollard.....	Kennell, ".....	110
44.....	T. N. Irvine.....	Melfort, Sask.....	121
45 Secs. 1, 2, 3, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 34, 35, 36 only.....	Peter Aikenhead.....	Melfort, Sask.....	386
Range 20			
Tp 16.....	Peter Horn.....	Regina, Assa.....	193
17.....	George Goldie.....	do ".....	196
18.....	Robt. G. Fitzpatrick.....	do ".....	91
19.....	John E. Petrie.....	Tregarva, Assa.....	109
20.....	Isaac W. Sutton.....	do ".....	90
44.....	William Flett.....	Flett's Springs, Sask.....	449
Range 21			
Tp 17.....	Sanders Howe.....	Pense, Assa.....	126
18.....	John Mullen.....	Wascana, Assa.....	139
19.....	S. S. Dickson.....	Lumsden, ".....	118
20.....	J. J. Grant.....	Craven, ".....	291

*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Second Mer.— <i>Con.</i>			
Range 21— <i>Continued.</i>			
44, Secs. 21, 22, 25, 26, 27, 28, 30, 31, 33, 34, 35, 36 only—			
45.....	Robert Hartley.....	Kinistino, Sask.....	106
Range 22			
Tp 16.....	Thos Clark.....	Pense, Assa.....	63
17.....	William Cator.....	" ".....	243
18.....	C. E. Fish.....	Cottonwood, Assa.....	92
19.....	Alexander Mutch.....	Lumsden, Assa.....	95
45.....	W. H. Stretton.....	Weldon, Sask.....	194
46.....			169
48 Portions of each township			
49 lying between Rivers..	James Dunlop.....	Birson, Sask.....	375
Range 23			
Tp 17, Secs. 31, 32, 33, 34, 35, 36 only and Tp 18.....	Thomas Brooks.....	Stony Beach, Assa.....	179
46.....	George Taylor, Junr..	Brancepeth, Sask.....	97
48 and 49, Portions of each township between rivers..	Richard Stewart.....	Steep Creek, Sask.....	374
Range 24			
Tp 17.....	Nelson T. Allcock.....	Pasqua, Assa.....	264
18.....	John A. Fleury.....	Stony Beach, Assa.....	204
47 and 48, portions between rivers.....	George S. Reid.....	Colleston, Sask.....	377
Range 25			
Tp 17.....		Assa.....	201
18.....	Daniel Gilmour.....	Moose Jaw, ".....	34
19, Fr. South of Buffalo Lake	Robert McCartney....	Point Elma, ".....	57
46.....	Samuel Leask.....	Puckahn, Sask.....	376
47.....	F. D. Cherry.....	Prince Albert, Sask.....	373
48.....	Thos. McCloy.....	" ".....	372
Range 26			
Tps 12 to 16 and 20 to 26 all inclusive, Moose Jaw Large District			
17.....	David Copeland.....	Moose Jaw, Assa.....	276
19 south of Buffalo Lake.....	Robert McCartney....	Point Elma, ".....	57
27 and 28, Saskatoon Large District			
Fr 45 including River Lots 1, 2, 3	David McNabb.....	Halcro, Sask.....	366
46 including River Lots.....	Hiram P. Harkness...	Prince Albert, Sask.....	246
47.....			
48 including River Lots 52 to 82 inclusive and all of Hudson's Bay Co.'s Reserve not included within Town of Prince Albert.....	Alexander McBeth .	Prince Albert, Sask.....	265



*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

ARBA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Second Mer.— <i>Con.</i>			
Range 27			
Tps 12, 13, 14, and 15 to 19 inclusive. Moose Jaw Large District			
Tps 16.....	John Pascoe.....	Moose Jaw, Assa.....	200
17.....	Ben. Smith.....	do ".....	36
18.....	Thos. Winn.....	Marlborough, Assa.....	203
27 and 28, Saskatoon Large District			
Tps 45 including River Lots 1 to 24 inclusive and Secs. 25, 26, 27, 34, 35 and 36 only—			
46 east half only.....	A. D. Boylan.....	Prince Albert, Sask.....	245
45 south of river with River Lots—			
45a.....	Franz I. Hauser.....	St. Louis, Sask.....	288
45 west half only and River Lots 25 to 48 inclusive.....	Norman McLeod.....	Willoughby, Sask.....	416
47 part not included in districts 391 and 392.....	Joseph Finlayson.....	Prince Albert, Sask.....	248
47 Secs. 1, 2, 3, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27 only	Albert Hodgson.....	Prince Albert, ".....	391
47 Secs. 4, 5, 6, 7, 8, 9, 16, 17, 18, 19, 20, 21 only.....	James Adams.....	Kirkpatrick, ".....	392
Range 28			
Tp 12, 13, 14, 15 and 19 to 26 inclusive, Moose Jaw Large District			
16 Secs. 1, 12, 13, 24, 25, 26 only.....	John Pascoe.....	Moose Jaw, Assa.....	200
17.....	John Wilson.....	Caron, ".....	205
18.....	W. McBride.....	do ".....	266
27 and 28, Saskatoon Large District.			
43 Secs. 21, 22, 23, 24, 25, 26, 27, 34, 35, 36 only—			
44			
45a			
45 South of River including River Lots 1 to 12 inclusive	Azaric Gareau.....	Garonne, Sask.....	439
Fr 46.....	Malcolm McLeod.....	Willoughby, Sask.....	281
Fr 47 except Secs. 1, 2, 13, 24.....	Alfred Bennett.....	Lily Plains, ".....	247
Tp 47 Secs. 35 and 36 and River Lots 1 to 51 inclusive—			
48.....	Joseph Finlayson.....	Prince Albert, ".....	248
47 Secs. 1, 2, 13, 14 only.....	James Adams.....	Kirkpatrick, ".....	392
Range 29			
Tp 12 to 17 and 19 to 26 all inclusive, Moose Jaw Large Dist.			
27 and 28 Saskatoon Large District			
18.....	H. C. Brown.....	Caron, Assa.....	215

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Second Mer.— <i>Con.</i>			
Range 30			
Tp 12 to 26 inclusive, Moose Jaw Large District.			
West Third Meridian.			
Range 1			
Tp 12 to 26 inclusive, Moose Jaw Large District			
27 to 38 inclusive, Saskatoon Large District.			
44.....	Chas. Damasse Racette	Duck Lake, Sask .....	287
46.....	Malcolm McLeod .....	Willoughby, " .....	281
47 including River Lots 1 to 14 inclusive			
48 Fractional Tp			
49, portion south of Saskatche- wan River.....	Alfred Bennett .....	Lily Plains, Sask... ..	247
Range 2			
Tp 12 to 26 inclusive, Moose Jaw Large District.			
27 to 38 inclusive, Saskatoon Large District			
42 and 43a.....	J. B. Friesen .....	Rosthern, Sask .....	331
43 and 44.....	Alcide Marcotte.....	Duck Lake, Sask .....	125
48 Secs. 28, 29, 30, 31, 32, 33 only, and			
49 West half only .....	Samuel Halliwell.....	Shellbrook, " .....	337
Range 3			
Tp 12 to 26 inclusive, Moose Jaw Large District			
27 to 38 inclusive, Saskatoon Large District.			
40.....	J. H. Klaassen.....	Rosthern, Sask. ....	338
Tp 42.....	Peter Siemens, Junr..	" " .....	333
43 and 43a.....	Heinrik Wall.....	" " .....	334
44.....	Francois Ripaud.....	Duck Lake, Sask.....	335
45 and 46.....	A. N. Peterson.....	Wingard " .....	336
48 Secs. 29, 30, 31, 32, only and			
49 west two tiers of sections only.....	Robert Sterling.....	Shellbrook " .....	385
48 Secs. 25, 26, 27, 28, 33, 34,35, 36 only and			
49 East four tiers of sections only, and			
50 Secs. 1, 2, 3, 4, 9, 10, 11, 12 only.....	Samuel Halliwell. ....	" " .....	337
Range 4			
Tp 12 to 26 inclusive, Moose Jaw Large District			
27 to 38 inclusive, Saskatoon Large District			

*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Third Mer.— <i>Con.</i>			
Range 4— <i>Continued.</i>			
40.....	J. H. Klaassen.....	Rosthern, ".....	338
42.....	Diedrich Epp.....	" ".....	446
43.....	Peter Heppner.....	" ".....	340
44 and 45 south of Saskatchewan River with River Lots 1 to 7 inclusive and H. B. Reserve.....	John J. Dyck.....	" ".....	341
48 Secs. 25, 26, 27, 28, 29, 32, 33, 34, 35, 36 only.....	Samuel Halliwell.....	Shellbrook, ".....	337
49 except Secs. 6, 7, 18, 19, 30, 31, 32, 33, 34, 35, 36.....	Robert Sterling.....	" ".....	385
Range 5			
Tp 12 to 26 inclusive, Moose Jaw Large District			
27 to 38 inclusive, Saskatoon Large District			
42.....	D. D. Neufeldt.....	Rosthern, ".....	343
43 portion south of River			
44 including River Lots 9, 10, 11.....	Peter Harms.....	" ".....	344
Range 6			
Tp 12 to 26 inclusive, Moose Jaw Large District			
27 to 35 inclusive, Saskatoon Large District			
36 and south half of 37.....	Henry Smith.....	Saskatoon, ".....	280
38 Saskatoon Large District			
Range 7			
Tp 12 to 26 inclusive, Moose Jaw Large District			
27 to 38 inclusive, Saskatoon Large District			
Range 8			
Tp 12 to 26 inclusive, Moose Jaw Large District			
27 to 38 inclusive, Saskatoon Large District			
Range 9			
Tp 9 to 20 inclusive, Swift Current Large District			
27 to 38 inclusive, Saskatoon Large District			
Range 10			
Tp 9 to 20 inclusive, Swift Current Large District			



*List of Local Improvement Districts with Description of and Name of  
Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	LIST. NO.
West Third Mer.— <i>Con.</i>			
Range 10— <i>Continued.</i>			
37 to 44 inclusive, Battleford Large District			
Range 11			
Tp 9 to 20 inclusive, Swift Cur- rent Large District			
37 to 44 inclusive, Battleford Large District			
Range 12			
Tps 9 to 20 inclusive Swift Cur- rent Large District			
37 to 44 inclusive, Battleford Large District			
Range 13			
Tps 9 to 14 inclusive, Swift Cur- rent Large District.			
15 west half .....	William Rutherford ..	Swift Current, Assa.....	383
15 east half and 16 to 20 inclu- sive, Swift Cur. Large Dist.			
37 to 44 inclusive, Battleford Large District			
Range 14			
Tps 9 to 14 inclusive, Swift Cur- rent Large District			
15 east half .....	William Rutherford ..	Swift Current, Assa.....	383
15 west half and 16 to 20 inclu- sive, Swift Cur. Large Dist.			
40 to 48 inclusive, Battleford Large District			
Range 16			
Tps 9 to 20 inclusive, Swift Cur- rent Large District			
40 to 48 inclusive, Battleford Large District			
Range 17			
Tps 9 to 20 inclusive, Swift Cur- rent Large District			
40 to 46 inclusive, Battleford Large District			
47 and 48, portions north of Jackfish Lake .....	Thomas Duhaime.....	Jackfish Lake, Sask. ...	232
Range 18			
Tps 9 to 20 inclusive Swift Cur- rent Large District			

*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Third Mer.— <i>Con.</i>			
Range 18— <i>Continued.</i>			
40 to 44 inclusive, Battleford Large District.			233
45 and 46, portions between Battle & Saskatchewan Rivers & Thunderchild's Ind. Res.	Alex. R. Chisholm ....	Bresaylor, Sask.....	
47 & 48 Battleford Large Dist.			
Range 19			
Tps 9 to 20 inclusive, Swift Current Large District			
45 and 46, portions between Battle & Saskatchewan Rivers & Thunderchild's Ind. Res.	Alex. R. Chisholm ....	Bresaylor, " .....	233
47 & 48, Battleford Large Dist.			
Range 20			
Tps 9 to 20 inclusive, Swift Current Large District			
45 to 48 inclusive, Battleford Large District			
Range 21			
Tps 5 to 14 inclusive, Maple Creek Large District.			
45 to 48 Battleford Large Dist.			
Range 22			
Tps 5 to 14 inclusive, Maple Creek Large District.			
Range 23			
Tps 5 to 14 inclusive, Maple Creek Large District. 5			
Range 24			
Tps 5 to 14 inclusive, Maple Creek Large District.			
Range 25			
Tps 5 to 14 inclusive, Maple Creek Large District.			
Range 26			
Tps 5 to 10 inclusive, Maple Creek Large District.			
11.....	David Kearns .....	Maple Creek, Assa.....	197
Tps 12, 13, and 14 Maple Creek Large District			

*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Third Mer.— <i>Con.</i>			
Range 27			
Tps 5 to 14 inclusive, Maple Creek Large District.			
Range 28			
Tps 5 to 14 inclusive, Maple Creek Large District.			
Range 29			
Tps 5 to 14 inclusive, Maple Creek Large District.			
Range 30			
Tps 5 to 14 inclusive, Maple Creek Large District.			
West Fourth Meridian.			
Range 1			
Tps 7 to 14 inclusive Medicine Hat Large District.			
Range 2			
Tps 7 8, E. $\frac{1}{2}$ 9, and 10 to 14 inclus., Medicine Hat Large Dist. 9 West half.....	James Robinson .....	Josephsburg, Assa .....	444
Range 3			
Tps 7 8, W. $\frac{1}{2}$ 9, and 10 to 14 inclus., Medicine Hat Large Dist. 9 East half .....	James Robinson .....	Josephsburg, Assa .....	444
Range 4			
Tps 7 to 14 inclusive Medicine Hat Large District.			
Range 5			
Tps 7 to 11 inclusive, Medicine Hat Large District. 12..... 13 & 14, Medicine Hat Lar. Dist.	George Jenkins .....	Dunmore, Assa .....	445
Range 6			
Tps 7 to 14 inclusive Medicine Hat Large District.			



*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Fourth Mer.— <i>Con</i>			
Range 7			
Tps 7 to 14 inclusive, Medicine Hat Large District.			
Range 15			
Tp 56.....	Patrick Boland.....	Manawan, Alberta.....	51
Range 17			
Tp 10 to 14 inclusive, Lethbridge Large District.			
51.....			402
52.....	J. D. McAllister .....	Beaver Lake, Alta.....	403
Range 18			
Tp 10 to 14 inclusive, Lethbridge Large District.			
50.....	Asa Erickson.....	Logan, ".....	400
51, West of Beaver Lake .....	Daniel Francis .....	Tofield, ".....	401
52, West of Beaver Lake .....	John Deans .....	Logan, ".....	404
56.....	E. S. Harris .....	Edna, ".....	446
56.....	Harry Belcher .....	Wostok, ".....	407
Range 19			
Tps 10 to 14 inclusive, Lethbridge Large District.			
15 to 19 inclusive High River Large District.			
50.....	Hugh Mitchell .....	Logan, ".....	405
51, west of Beaver Lake .....	Daniel Francis.....	Tofield, ".....	401
53.....	Abel Hallberg .....	Fort Saskatchewan, Alta.....	406
54.....			256
55.....	Daniel McLean.....	Edna, Alta .....	40
56.....	Alfred Gray .....	do ".....	43
57.....	Peter Keinisch .....	do ".....	45
Range 20			
Tps 10 to 14 inclusive, Lethbridge Large District.			
15 to 19 inclusive, High River Large District			
43.....	C. W. Peterson.....	Edna, Alta .....	450
44.....	Wm. Bredeson.....	Duhamel Alta.....	464
45 and 46, south of Battle River and Driedmeat Lake.....	G. T. Campbell .....	do ".....	328
46 balance.....	Jacob Elnes .....	do ".....	432
55.....	John Nix.....	Fort Saskatchewan, Alta.....	41
56.....	Julius Lilge .....	Bruederheim, Alta.....	56
Range 21			
Tps 6 to 14 inclusive, Lethbridge Large District			

*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Fourth Mer.— <i>Con.</i>			
Range 21— <i>Continued.</i>			
15 to 19 inclusive, High River Large District.			
22 to 28 inclusive, Calgary Large District.			
43, west Red Deer Lake.....	John Bergman .....	Wetaskiwin, Alta.....	430
44.....	Charles F. Kezar .....	Lewisville, " .....	457
45 four south tiers of Secs. only	P. O. Haukedahl .....	Duhamel, " .....	437
45 two north tiers and		" .....	
46 south of River and including Riv. Lots 25 to 48 inclus.	F. M. Walker.....	do " .....	255
46 north of Battle Riv. & including Riv. Lots 1 to 24 inclus.	Andrew Carruthers...	do " .....	237
47.....	W. A. Montgomery ...	Wetaskiwin " .....	455
48.....	John Moe .....	do " .....	433
53.....			459
54.....	David Simpson .....	Beaver Hills, " .....	20
55.....	John Fluker.....	Fort Saskatchewan, Alta	17
Range 22			
Tps 1 to 4 inclus., Cardston L. Dist.			
5 to 14 inclusive, Lethbridge Large District.			
15 to 19 inclusive, High River Large District.			
22 to 28 inclus., Calgary L. Dist.			
40 and south half of 41.....	William Cook .....	Lamerton, Alta. ....	229
43.....	John A. Bergman .....	Wetaskiwin, " .....	430
44.....	John G. Wilcher.....	Lewisville, " .....	435
45, east and south of Battle Riv.			
46, east of Battle River.....	Benjamin Schantz....	do " .....	77
46, north of Battle River and Pipestone Creek .....	Andrew Carruthers ...	Duhamel, " .....	237
46, west Battle River and south of Pipestone Creek .....	E. W. Whittaker .....	Wetaskiwin, " .....	59
47.....	Charles A. Klyft.....	do " .....	451
52.....	Robert Easton.....	Agricola, " .....	458
53.....	T. G. Pearce.....	do " .....	2
54.....	Wm. Simmons.....	do " .....	31
55, S. & E. of R. and R. Lots 1, 3, 5, 7 .....	John Fluker.....	Fort Saskatchewan, Alta	17
55, N. & W. of Saskatchewan R. & including R. Lots 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26,			
56.....	C. S. Godbout .....	Lamoureux, Alta. ....	222
	Vital Cousineau .....	Fort Saskatchewan, Alta	223
Range 23			
Tps 1 to 4 inclus., Cardston L. Dist.			
5 and 6 east of St. Mary's R. Lethbridge Large District.			
9 to 14 inclusive, New Oxley Large District.			
15 to 19 inclusive, High River Large District.			
22 to 28 inclus., Calgary L. Dist.			

*List of Local Improvement Districts with Description of and Name of  
Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Fourth Mer.— <i>Con.</i>			
Range 23.— <i>Continued.</i>			
43. ....	O. C. Ravensberg.....	Wetaskiwin, Alta. ....	429
44. ....	Erik K. Thuland .....	do " .....	431
45, south & east of Battle Riv.	Benjamin Schantz.....	Lewisville, " .....	77
45, balance. ....	William Abbott .....	Wetaskiwin, " .....	220
46, west Battle Riv. and South Pipestone Creek. ....	E. W. Whittaker.....	do " .....	59
46, N. & E. of Pipestone Creek	Andrew Carruthers ...	Duhamel, " .....	237
47, south and west of Coal Lake	Thomas Dahl.....	Wetaskiwin, " .....	222
47, balance .....	Charles A. Klyft.....	do " .....	451
51. ....	Leander Fulton .....	Strathcona, " .....	48
52. ....	Samuel Galley.....	do " .....	32
53 N. & W. of R. and including R. Lots 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, 36, 38, 40 and 42. ....	Francis C. Clare.....	Edmonton, " .....	68
53, south and east of River and including R. Lots 25, 27, 29, 31, 33, 35, 37, 39, 43 and 45. ....	J. G. Ottewell .....	Clover Bar, " .....	39
54 north and west of Riv. and including R. Lots 28 and 30	James Cram.....	Horse Hills, " .....	23
54 south of Riv. and including R. Lots 9, 11, 13, 15, 17, 19, 21	William Simmons ....	Agricola, " .....	31
55. ....	John Hall .....	New Lunnon, " .....	73
56. ....	F. X. Bibeaud.....	Lamoureux, " .....	230
Range 24			
Tps 1 to 4 inclus., Cardston L. Dist.			
5 south of St. Mary's River, Lethbridge Large District.			
8 & 9, Macleod Large District (part of 9).			
9 and part 10 New Oxley Large District.			
10 (part of) Macleod L. Dist.			
11 to 14 inclusive, New Oxley Large District.			
15 to 19 inclusive, High River Large District.			
23 to 25 inclus., Calgary L. Dist.			
45. ....	Christopher C. Reid..	Bears' Hill, " .....	241
46. ....	A. S. Fosenroll .....	Wetaskiwin, " .....	240
47. ....	Frank Lucas .....	do " .....	434
48. ....	Carl Lietz.....	Leduc, " .....	438
49. ....	Daniel Schelin .....	do " .....	37
50. ....	William Heatley.....	Strathcona, " .....	35
51. ....	Elias Dixon .....	do " .....	159
52 includ. R. L. 1, 3, 5, 7, 9, 11, 13, 15, 15a, 17, 19, 21, 23, 23a & 25a	Lawrence Garneau ...	do " .....	47
53 portion N. of Sask. River...	Francis C. Clare .....	Edmonton, " .....	68
53 portion S. of Sask. River...	J. G. Ottewell .....	Clover Bar " .....	39
54. ....	John Meneely .....	Edmonton, " .....	30
55. ....	C. Carruthers .....	Namao, " .....	42
56. ....	George Mulligan.....	New Lunnon, " .....	69



*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO
West Fourth Mer.— <i>Con.</i>			
Range 25			
Tp 2 Secs. 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36 only—			
3 portions north of St. Mary's River of Secs. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 23 only..	James Quinton .....	Cardston, Alta.....	56
1 2, 3, balance, Cardston Large District.			
6 7, 8, and part of 9, Macleod Large District.			
9 and 10, parts of, New Oxley Large District.			
10 part of, Macleod Large Dist.			
11 to 14 inclusive, New Oxley Large District.			
15 to 19 inclusive, High River Large District.			
20 21, 22, Okotoks Large Dist.			
23 to 28 inclus., Calgary L. Dist.			
40.....	Alfred Glanville .....	Lacombe, Alta.....	236
41.....	D. Foran.....	Urquhart, ".....	414
42.....	R. J. McCue .....	Ponoka, ".....	326
46.....	L. D. Hanna.....	Wetaskiwin, ".....	327
47.....	Frank Lucas.....	do ".....	434
48.....	Fred Falkenburg .....	Leduc, ".....	425
49.....	R. Stewart .....	do ".....	21
50.....	Andrew Pogue .....	Strathcona, ".....	22
51 and Fr 52 south of River...	James Groves .....	Whitemud, ".....	24
52 fractional part north of Riv.			
53 includ. R. Lots 50 to 55 inclus.	Samuel Soucy .....	Edmonton, ".....	45
54 includ. R. Lots 16 to 49, 56 to 64, 18a to 26a all inclusive..	Delmar Bard.....	St. Albert, ".....	52
55.....	A. A. Ringuette .....	Morinville, ".....	235
56.....	Joseph Dupuis.....	do ".....	226
Range 26			
Tp 2 Secs. 25, 26, 35, 36 only—			
3 Secs. 1, 12 only .....	James Quinton .....	Cardston, ".....	56
1 2, 3, except district 56, Cardston Large District.			
5 to 8 inclusive, Macleod Large District.			
9 part of, Macleod Large Dist.			
9 to 14 inclusive, New Oxley Large District.			
15 to 19 inclusive, High River Large District.			
20 21, 22, Okotoks Large Dist.			
23 to 28 inclus., Calgary L. Dist.			
35.....	W. S. Bilton.....	Innisfail, ".....	83
36.....	Hiram Letts.....	Edwell, ".....	325
37.....	Thomas Hoskin .....	Red Deer, ".....	323
38 portion south of River—			
39 portion south of River.....	Elias Code .....	do ".....	278
39 portion north of River.....	John B. Hunter .....	Lacombe, ".....	460
40.....	John N. Poole .....	do ".....	259
41.....	David McDonald .....	do ".....	408

*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Fourth Mer.— <i>Con.</i>			
Range 27— <i>Continued.</i>			
42 fractional .....	R. J. McCue .....	Ponoka, " .....	326
49 .....	E. J. Larose .....	Leduc, " .....	424
50 .....	Jacob Oswald .....	Strathcona, " .....	218
52 Fr .....	S. J. Eccles .....	Spruce Grove, " .....	28
53 including R. Lots 1, 2, 3, 4, 9, 10, 11, 12, 13, 14, 15, and A to I all inclusive .....	Gideon Lacerte .....	do " .....	46
54 including R. Lots 5, 6, 7, 8 .....	L. Lambert .....	St. Albert " .....	55
55 .....	John McRae .....	Riviere-qui-Barre, Alta .....	192
56 .....	Fred Beaudry .....	St. Albert, Alta .....	277
Range 27			
Tp 1 Cardston Large District.			
2 east of Belly river .....	Samuel Webster .....	Mountain View, Alta ....	58
4 to 8 inclus., Macleod Large District.			
9 to 14 inclusive, New Oxley, Large District.			
15 to 19 inclusive, High River Large District.			
20, 21, 22, Okotoks Large Dist.			
23 to 28 inclus., Calgary L. Dist.			
34 .....	Anthony Smith, Senr. .....	Innisfail, Alta .....	262
35 .....	James N. McLean .....	do " .....	66
36 .....	William Inglis .....	Penhold, " .....	324
37 .....	Christopher White .....	Red Deer, " .....	322
38 portions west and north of Red Deer River .....	S. M. Bannerman .....	Greenlaw, " .....	258
38 portion south of River .....	Elias Code .....	Red Deer, " .....	278
40 .....	Joseph Drader .....	Lacombe, " .....	225
49 .....	E. T. Buckell .....	Leduc, " .....	422
50 .....	P. E. Dalquist .....	do " .....	423
52 .....	S. J. Eccles .....	Spruce Grove, Alta .....	28
53 and fractional S. $\frac{1}{2}$ of 54 .....	Daniel Brox .....	do " .....	29
53 and N. $\frac{1}{2}$ of fractional 54 .....	William Cyr .....	Riviere-qui-Barre, Alta .....	38
Range 28			
Tp 1 east of Belly River, Cardston Large District.			
1 west of Belly River, Macleod Large District.			
2 east of Belly River .....	Samuel Webster .....	Mountain View, Assa ...	58
2 west of Belly River, Macleod Large District.			
3 to 8 inclus., Macleod Large District.			
9 to 14 inclusive, New Oxley Large District.			
15 to 18 High Riv. Large Dist.			
19 .....	W. B. Thorne .....	High River, " .....	213
20 .....	A. W. H. Thompson .....	Gladys, " .....	409
21 .....			
22 portion south of River .....	Robert A. Begg .....	Dunbow, " .....	207
22 north of Riv, Okotoks Large District.			

*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Fourth Mer.— <i>Con.</i>			
Range 28— <i>Continued</i>			
23 to 28 inclus., Calgary L. Dist.			
34.....	Edward Bothamley ...	Innisfail, Sask...	221
35.....	Robert L. Earl .....	do " ...	71
36 west of Red Deer River ...	John Bjornson.....	Tindastoll, " ...	81
36 east of Red Deer River ...	George Fleming .....	Penhold, " ...	396
38 south of River .....	Elias Code .....	Red Deer, " ...	278
38 and 39 portions west and north of Red Deer River ..	S. M. Bannerman.....	Greenlaw, " ...	258
51 Fr.....	Frank Sieh.....	Stony Plain, " ...	25
52 Fr.....	J. B. Butchart.....	do " ...	26
53.....	Israel Umbach .....	Spruce Grove, " ...	44
54 Fr., N. $\frac{1}{2}$ of, .....	William Cyr.....	Riviere-qui-Barre, " ...	38
54 Fr., S. $\frac{1}{2}$ of, .....	Daniel Brox.....	Spruce Grove, " ...	29
Range 29			
Tps 1 to 4 inclus., Macleod Large District.			
5.....	James Taylor.....	Pincher Creek " ...	363
6.....	Francis Willock .....	do " ...	360
7 to 10 inclusive, Pincher Crk. Large District.			
11 to 14 inclusive, New Oxley Large District.			
15 to 18 inclusive, High River Large District.			
19.....	S. A. Roberts.....	High River, " ...	441
20.....	William E. McLeod...	Okotoks, " ...	211
22.....	Albert Caseley .....	Calgary, " ...	293
23.....	George Madge .....	do " ...	294
24 to 28 inclusive, Calgary Large District.			
34 Fr.....	Edward Bothamley ...	Innisfail, " ...	221
Range 30			
Tps 1 to 4 inclusive, Macleod Large District.			
5.....	James Taylor.....	Pincher Creek, " ...	363
6.....	Francis Willock .....	do " ...	360
7 to 10 inclusive, Pincher Crk. Large District.			
11 to 14 inclusive, New Oxley Large District.			
15 to 19 inclusive, High River Large District.			
20 21, 22, Okotoks Large Dist.			
West Fifth Meridian.			
Range 1			
Tps 1 to 4 inclusive, Pincher Crk. Large District.			
Fr 5 and 6.....	Wm. R. Lees.....	Pincher Creek, " ...	361



*List of Local Improvement Disiricts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Fourth Mer.— <i>Con.</i>			
Range 1— <i>Continued</i>			
7 portion S. of Middle Fork R.	H. R. Parker . . . . .	Pincher Creek, Assa. . . . .	362
7 portion N. of Middle Fork			
8 west half only			
9 west half only . . . . .	H. G. Nash . . . . .	Livingstone, " . . . .	418
10 to 14 inclusive, Pincher Crk. Large District.			
15 to 19 inclusive, High River Large District.			
20 . . . . .	James Rodgers . . . . .	Panima, " . . . .	275
21 . . . . .	Donald Gray . . . . .	do " . . . .	279
22 Okotoks Large District.			
23 portion east of River . . . . .	George Madge . . . . .	Calgary, " . . . .	294
23 portion west of Bow River . . . . .	George Bolt . . . . .	do " . . . .	273
24 portion south of Bow River	Chas. Jackson . . . . .	do " . . . .	219
24 north of Bow R. except Secs. 19, 20, 21, 28, 29, 30, 31, 32, 33	J. W. Hayes . . . . .	do " . . . .	216
24 Secs. 19, 20, 21, 28, 29, 30, 31, 32, 33 only . . . . .	A. S. McKay . . . . .	do " . . . .	390
25 except Section 6 . . . . .	J. W. Hayes . . . . .	do " . . . .	216
25 Section 6 only . . . . .	A. S. McKay . . . . .	do " . . . .	390
26 27, 28, Calgary Large Dist.			
32 . . . . .	Amander Silverthorne	Olds, " . . . .	12
31 . . . . .	J. B. Schantz . . . . .	Didsbury, " . . . .	227
33 . . . . .	Edward Lewis . . . . .	Olds, " . . . .	13
34 . . . . .	Carl P. Anderson . . . . .	Bowden, " . . . .	224
35 . . . . .	J. Robinson, Eagle Ridge	Little Red Deer, Innisfail	67
36 N. and W. of Red Deer R.	John Bjornson . . . . .	Tindastoll, Alta . . . . .	81
37 . . . . .	John Johnson . . . . .	do " . . . .	382
38 . . . . .	Indridi F. Reinholt . . . . .	Red Deer, " . . . .	454
51 . . . . .	Frank Sieh . . . . .	Stony Plain, " . . . .	25
52 . . . . .	J. B. Butchart . . . . .	do " . . . .	26
53 . . . . .	Israel Umbach . . . . .	Spruce Grove, Alta . . . . .	44
Range 2			
Tps 2 to 5 inclusive, Pincher Crk. Large District.			
6 north of South Fork—			
7 West of South Fork . . . . .	H. R. Parker . . . . .	Pincher Creek, Alta . . . . .	362
8 Secs. 13, 14, 15, 22, 23, 24, 25, 26, 27, 34, 35, 36 only—			
9 Secs. 1, 2, 3, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 22, 23, 24, 25, 26, 27, 28, 29, 30 only . . . . .	H. G. Nash . . . . .	Livingstone, " . . . .	418
7 north of Middle Fork—			
8 Secs. 1, 2, 3, 10, 11, 12 only . . . . .	R. J. Hardy . . . . .	Gillingham, " . . . .	419
10 to 14 inclusive, and balance of 6 and 7, Pincher Creek Large District.			
15 to 19 inclusive, High River Large District.			
20 21, 22, Okotoks Large Dist.			
23 Calgary Large District.			
24 and portion 25 S. of Bow R.	Robert Walsh . . . . .	Calgary, " . . . .	209
24 north of Bow Riv. and Secs. 1, 2, 3, 10, 11, 12 in Tp 25 . . . . .	A. S. McKay . . . . .	do " . . . .	390
26 27, 28, Calgary Large Dist.			

*List of Local Improvement Districts with Description of and Name of Overseer.—Continued.*

AREA	NAME OF OVERSEER	P.O. ADDRESS	DIST. NO.
West Fourth Mer.— <i>Con.</i>			
Range 2— <i>Continued.</i>			
31.....	William Hunsberger..	Didsbury, Sask ...	387
32.....	E. Bame.....	Olds, " ...	14
33.....	Peter Jaffery.....	Olds, " ...	15
36 two east tiers of Secs. only.	John Bjornson.....	Tindastoll, " ...	81
37.....	Th. Gudmundson.....	do " ...	381
Range 3			
Tps 4, 5, 6, and parts 7 and 8, Pincher Creek Large Dist.			
7 Secs. 1, 2, 9, 10, 11, 12, 13, 14, 15, 16, 23, 24, 25, 26, 35 & 36			
8 Secs. 1, 2, 11, 12, 13, 14, 23, 24, 25, 26, 35 and 36 only.....	R. J. Hardy .....	Gillingham, " ...	419
9 to 14 inclusive, Pincher Creek Large District.			
15 to 19 inclusive, High River Large District.			
20 21, 22, Okotoks Large Dist.			
23 Calgary Large District.			
24 and part S. of Riv. of Tp. 25 .....			212
25 part of, and 26 to 28 inclus., Calgary Large District.			
32 .....	James Morphy .....	Olds, " ...	54
33 .....	J. B. Edwards .....	Olds, " ...	463
54 .....	Albert Cunningham ..	Lac Ste. Anne, " ...	231
Range 4			
Tps 4 to 14 inclusive, Pincher Crk. Large District.			
15 to 19 inclusive, High River Large District.			
20 21, 22, Okotoks Large Dist.			
23 24, 25, Calgary Large Dist.			
25 portion north of Bow R. and 26 .....	Walter B. Elliott .....	Cochrane, " ...	208
27 and 28, Calgary Large Dist.			
54 north half of, and part S. of Lac Ste. Anne of Tp. 55....	Albert Cunningham...	Lac Ste. Anne, " ...	231
Range 5			
Tps 5 to 14 inclusive, Pincher Crk. Large District.			
15 to 19 inclusive, High River Large District.			
23 to 28 inclus., Calgary L. Dist.			
Range 6			
Tps 10 to 14 inclusive Pincher Crk. Large District.			
26 including River Lots 1a to 9 inclusive .....	F. M. Graham.....	Morley, " ...	217
Range 10			
Tp 24.....	Samuel Stirton .....	Canmore, " ...	267

The character and volume of the work which was performed last year in the organised districts will be best understood from the following condensed statement:

## Statement.

Amount collected for taxes on lands owned by companies or other nonresident owners, and for commutation for year 1899 .....	\$14,867 93
Number of miles of road graded .....	572
“ “ cleared .....	672
“ “ fireguard ploughed .....	1,307
“ bridges built .....	131
“ “ repaired .....	139
“ culverts built .....	444
“ “ repaired .....	159
“ dams built .....	28
“ “ repaired .....	62
“ holes, old wells cellars and sloughs filled .....	1,828
“ yards of corduroy completed .....	3,817
“ days worked in commutation of taxes .....	36,634
Average amount per district paid to overseers for making assessments, overseeing work and performing other duties connected with districts .....	\$23 92

The above statement of the work done in Local Improvement Districts during the past year shows a considerable increase over that performed during the season of 1898. In several districts work could not be performed owing to the wet season, but these districts propose to do in 1900 the work which should have been done in 1899.

The figures in the statement give satisfactory evidence of the manner in which the people are carrying out the provisions of the Ordinance, and while the proportionate increase in the amount of road grading which was performed is not so great as that of some other branches of work, the figures show that there has been a strong effort to fulfil the requirements of the law by performing work which was possible.

The weather during the year was so exceptionally wet as to almost preclude the possibility of road grading, but as the statement shows, the Districts have turned their attention to clearing timber and scrub and filling sloughs and holes on road allowances, and constructing culverts and small bridges with the labour available, so that during the coming season, if the weather is favourable, they may devote the larger portion of their labour to the grading of roads.

To assist the districts in performing their road improvements the Department supplied road grading machines together with an expert foreman, the district supplying the men and teams necessary to operate the machines. This system has been found to work advantageously and it has the merit of ensuring that road improvements performed with a grading machine, handled by a competent foreman, will be of a more permanent and satisfactory character than that ordinarily completed with plough or scraper in commutation of taxes.

Nearly 15 per cent. of the assessment was paid to the overseers in cash during the year and a further 55 per cent. of the taxes was commuted by labour.



In those districts where the provisions of the law received adverse criticism a year ago, the residents are now largely convinced of the benefits to be derived from its enforcement, and from most of such districts reports have been received giving expression to the satisfaction of the residents with the operation of and the beneficial results of the law.

A further evidence of the increasing popularity of the law may be found in the fact that applications are being received from the residents of areas adjacent to Local Improvement Districts asking for the formation of new districts, so that they may reap the benefits enjoyed by residents of districts already in operation, and the work of which has proved an impressive object lesson as to the advantages to be obtained by residents of districts under the operation of the provisions of the Ordinance.

Last year we inaugurated the system of sending a notice to those persons whose names appeared on the overseer's annual return as having failed to pay or commute their taxes and in response to such notices the sum of \$1772.28 was collected and duly forwarded to the different overseers. Action was also taken through the Attorney General's Department to collect certain large sums due districts by land owning companies, and the amount of these taxes received and paid to the districts.

During the present year it will be necessary to take action under the provisions of the Ordinance for the forfeiture to the Crown of lands within Local Improvement Districts upon which taxes are in arrears for the past two years, and from present indications some 1500 to 2000 parcels of land will have to be dealt with under these provisions.

The information given herein proves, I think, that The Local Improvement Ordinance is now working smoothly and that an honest effort is being made by the people of the Territories to take upon themselves the burden of work which may properly be termed "local," and thus leave the Department with a free hand to undertake the class of work more properly designated as "public work."

It may, however, be pointed out that the present provisions of The Local Improvement Ordinance, would be improved by doing away with the right to commute taxes by labour in the small districts. At the last session of the Legislative Assembly the Ordinance was amended so as to provide for the doing away with the right to commute taxes upon receipt of a petition from the district. So far none of the districts have availed themselves of this provision and it may be expected that the question is one which, if left to the people themselves, will be deferred from time to time and year to year without action.

From information which we have it may be stated that in many of the most prosperous and progressive districts the representative residents are in favour of the abolition of the right to commute their taxes, but the matter is one in which none of the residents like to take the initiative. Our experience in administering the Local Improvement Ordinance demonstrates that labour performed in commutation of taxes is in a very large measure labour wasted. It is true that when commutation work is expended in the operation of road grading machines value is probably obtained for the amount of the commutation, but it may be laid down as a principle, proved not only by our experience but by that of the older provinces of the Dominion, and States to the south of us, that labour performed in commutation of road taxes is, in the majority of cases, labour wasted, and it is equally proved that the expenditure of the amount of the tax so commuted, in employing labour which could be expended under

proper supervision, in improving the roads, would achieve much better results.

The amendments to The Local Improvement Ordinance passed last session authorised the organisation of large Local Improvement Districts which in their main characteristics differ very materially from the smaller districts organised under the old Ordinance. The larger districts are not limited as to area, and within them a direct land tax of  $1\frac{1}{4}$  cents an acre is collected through an assessor or overseer appointed by the Lieutenant Governor in Council. This tax is not commutable by labour but is collected and transmitted to the Department for deposit to a trust account for the district and is then expended, under the direction of the Department, in making needed improvements within the district.

Under these provisions of the Ordinance eighteen large districts were constituted during the past year as shown by accompanying schedule, the districts in each case comprising large areas surrounding the central point from which the district is named.

#### LARGE LOCAL IMPROVEMENT DISTRICTS ORGANISED DURING 1899.

NAME OF DISTRICT.	OVERSEER.	P.O. ADDRESS.	NO.
Calgary .....	A. M. Grogan .....	Calgary, Assa .....	500
Okotoks .....	W. V. Mencke .....	De Winton, Alta .....	501
High River .....	Donald Mck. Murray .....	High River, Alta .....	502
Pincher Creek .....	John Hervon .....	Pincher Creek, Alta .....	503
Macleod .....	Darnley L. Murison .....	Macleod, Alta .....	504
Cardston .....	James Quinton .....	Cardston, Alta .....	505
Lethbridge .....	C. J. Atkinson .....	Lethbridge, Alta .....	506
Medicine Hat .....	Walter Crosskill .....	Medicine Hat, Assa .....	507
Maple Creek .....	John J. English .....	Maple Creek, Assa .....	508
Swift Current .....	W. Vaudreuil .....	Swift Current, Assa .....	509
Moose Jaw .....	J. K. Stevenson .....	Moose Jaw, Assa .....	511
Saskatoon .....	Harold Pendencygrasse .....	Dundurn, Assa .....	512
Battleford .....	Robt. Jefferson .....	Battleford Sask .....	513
New Oxley .....	Charles Sharples .....	New Oxley, Alta .....	514
Good Spirit .....	Robt. Russel Smith .....	Whitesand river, Assa .....	515
Good Spirit creek .....	Robert Buchanan .....	Devil's Lake Yorkton, Assa .....	516
Sheho .....	Elijah E. Pettit .....	Sheho, Assa .....	517
Weyburn .....	Henry McGowan .....	Weyburn, Assa .....	518

The assessment of the above mentioned districts for 1899 was not completed until late in the year owing to the large amount of work entailed in obtaining information as to land titles from the Land and Land Titles Offices and from the railway companies.

The amount of the assessment for the past year was \$31,836.55. Details are as follows :

500.	Calgary district .....	\$3,157 75
501.	Okotoks district .....	1,026 00
502.	High River district .....	1,791 00
503.	Pincher Creek district .....	110 00
504.	Macleod district .....	923 50
505.	Cardston district .....	1,777 00
506.	Lethbridge district .....	2,534 11

507.	Medicine Hat district .....	1,994 60
508.	Maple Creek district .....	3,188 00
509.	Swift Current district.....	2,091 00
511.	Moose Jaw district.....	2,727 50
512.	Saskatoon district .....	2,611 00
513.	Battleford district .....	717 00
514.	New Oxley district .....	1,127 29
515.	Good Spirit district .....	262 00
516.	Good Spirit Creek district .....	80 00
517.	Sheho district.....	596 80
518.	Weyburn district .....	2,082 00

A portion of the above mentioned assessment has been paid and will be available together with the current year's taxes, in completing necessary work in the different districts, this work being carried out by qualified foremen acting under instructions from the Department so as to ensure the best results. In many of the districts the larger land owning companies have not yet paid their taxes and suits for the collection of the amounts due have therefore been instituted through the Attorney General's Department. The imposition of a land tax naturally does not meet with approval at the hands of companies or individuals owning large areas, but if it is remembered that the areas still owned by the Crown, and the large blocks of land granted the Canadian Pacific and other railway companies, and not available for taxation, comprise the larger portion of the area contained within these districts it will be understood that the area available for taxation for necessary local development is not great and the burden of this taxation must necessarily fall somewhat unequally.

## VILLAGES.

As has already been mentioned the administration of The Village Ordinance is carried on through the Local Improvement Branch. The number of Villages now organised is thirty, made up as follows:

Number of villages organised during the past year ..... 10

Number of villages previously organised ..... 20

The names of organised villages and of the overseers are as follow :

NAME OF VILLAGE.	NAME OF OVERSEER	DATE OF ORGANISATION.
Alameda .....	David Hopper.....	29 December 1898.
Battleford.....	Robert Jefferson.....	31 December 1898.
Broadview .....	Angus McLeod .....	29 December 1898.
Cardston .....	Andrew R. Archibald .....	29 December 1898.
Carnduff .....	J. H. Taylor.....	28 March 1899.
Duck Lake .....	Wm. J. Campbell.....	29 December 1898.
Estevan .....	Henry Yardley .....	30 October 1899.
Fleming .....	E. McConnell .....	23 July 1896.
Fort Saskatchewan .....	James E. Graham .....	1 March 1899.
Gainsboro.....	J. J. Sadler.....	17 June 1894.
Grenfell .....	J. D. McDonell .....	25 April 1894.
Gleichen .....	John Finnigan .....	24 January 1899.
Innisfail .....	James Smith .....	14 December 1899.
Lacombe .....	Isaac Newton Burdick .....	12 August 1896.
Lumsden.....	Andrew Blair.....	29 December 1898.



NAME OF VILLAGE.	NAME OF OVERSEER.	DATE OF ORGANISATION.
Leduc.....	Mike Barrett .....	13 December 1899.
Maple Creek .....	David Kearns.....	9 May 1896.
Olds.....	Geo. H. Cloakey .....	8 June 1896.
Okotoks.....	Alexander McRae .....	24 October 1899.
Oxbow.....	Robert Sproule .....	7 March 1899.
Pincher Creek.....	A. R. Dempster.....	7 September 1898.
Fort Qu'Appelle .....	F. S. Proctor .....	4 July 1898.
Rouleauville.....	Alex. C. Kettleson, Calgary..	30 October 1899.
Red Deer .....	Geo. W. Greene .....	14 June 1894.
Rosthern .....	Wilhelm Rempel .....	29 December 1898.
Saltcoats .....	W. B. Smithett.....	16 April 1894.
St. Albert .....	.....	7 December 1899.
Wetaskiwin .....	.....	4 December 1899.
Wapella.....	Geo. E. Nugent.....	29 December 1898.
Yorkton .....	W. L. D. Kilborn .....	26 July 1894.

Twenty-one of these villages were assessed during the year and the returns show that the average rate of assessment was  $3\frac{1}{2}$  mills, ranging from one mill at Red Deer to 10 mills (the extreme limit) at Cardston. Two were assessed at 6 mills and the assessment in the others varied from 2 to 5 mills.

Three villages, namely Broadview, Maple Creek and Rosthern, have taken advantage of the provision of the Ordinance which empowers a village to incur liability, by borrowing, a sum not exceeding \$500 for the purpose of making permanent improvements or providing fire appliances for the village. At Broadview and Rosthern the money borrowed was spent in providing sidewalks and at Maple Creek a water supply was provided in the form of a deep well and pumping appliances.

At the last session of Assembly an amendment to The Village Ordinance was passed, which provides that upon receipt of a petition from three-fourths of the voters in any village, the Commissioner may order that the assessment in the village shall, after a date to be named, be limited to a rate based upon the actual value of all lands (without improvements) in the village. The village of Wetaskiwin, which was established during the year, forwarded a proper petition asking that the village be assessed in accordance with this provision, and the necessary order was made bringing this system of taxation into force. The results obtained from this "single tax" system cannot fail to prove interesting.

The compulsory provisions of The Village Ordinance enacted at the last session have permitted of the organisation during the year of several villages which refused organisation under the voluntary system previously in force and enabled us to do away with the incongruities and friction which perviously existed owing to the fact that these unorganised villages formed part of Local Improvement Districts.

#### IRRIGATION BRANCH.

Staff.....	{	1 Surveyor in charge of irrigation surveys.
		1 Assistant engineer.
		1 Draughtsman
		1 Clerk (stenographer and typewriter) in charge of records.

The Irrigation Branch of the Department differs from the other branches

in that it is charged with duties delegated to the Commissioner of Public Works by The North-West Irrigation Act, and the salaries of the staff, cost of the surveys and other work performed are paid from a special grant of \$10,000 a year made by the Dominion Government.

The correspondence and other work of this branch is carried on distinct from that of the other branches of the Department and the work of the past year of the branch is therefore summarised as follows :

Number of letters received .....	1,206
Number of letters sent .....	1,546
Mimeograph circulars and forms for collecting information in connection with administration of The North-West Irrigation Act .....	2,500
Number of applications for water rights received .....	40
Number of memorials received, examined and recorded in connection with applications for water rights .....	26
Number of plans received, examined and recorded in connection with applications for water rights .....	65
Number of final licenses received, recorded and issued (in triplicate) .....	51
Number of transfers, agreements for supply and use of water, and agreements granting easements for right of way prepared, recorded and certified (in triplicate) .....	35

The subject of irrigation is the most important question in Southern Alberta and Western Assiniboia requiring attention at the hands of the Government. Recognising this fact both the Dominion Government and the Legislative Assembly have passed well considered laws regarding the question and in The North-West Irrigation Act and The Irrigation Districts Ordinance we have legal enactments which should do much towards encouraging and establishing irrigation undertakings on a sound and lasting basis.

It is true that up to the year 1893 many residents of the semi arid portion of the Territories, and all the companies owning lands in that district, claimed that crops could be raised without irrigation, but the successive failures of crops owing to want of moisture, and the success which has attended the growth of crops by the aid of irrigation has now convinced the most sceptical that upon the introduction of irrigation systems is dependent the future success and development of that portion of the Territories. It is therefore gratifying to be able to direct attention to the fact that the past year has witnessed the commencement of construction of two large irrigation undertakings, The Canadian North-West Irrigation Company's canal and the canal of The Springbank Irrigation District. These undertakings are referred to at some length further on but it may be well to first outline the progress which irrigation development has so far made by giving some details of completed canals and ditches and the areas irrigated and irrigable therefrom.

Number of canals and ditches constructed .....	200
Area irrigated from constructed canals and ditches .....	54,392 acres
Area susceptible of irrigation from constructed canals and ditches .....	657,757 acres
Length of constructed canals and ditches .....	591 miles
Approximate cost of completed irrigation works .....	\$540,500

The majority of the canals and ditches scheduled above are comparative-

ly small undertakings constructed by private individuals for the irrigation of their own lands, but several of the systems, among which may be mentioned the canals constructed by the Calgary Irrigation Company, the Calgary Hydraulic Company, Mr. R. A. Wallace, Mr. W. R. Hull and Messrs. Findlay and McDougall are undertakings of considerable magnitude and design to reclaim large areas of hitherto comparatively unproductive land.

The subject of irrigation, and the work which is being undertaken by our general irrigation surveys cannot be treated of as their importance and many sided character require in a report of this character, but these questions are dealt with in special and detailed reports printed and issued each year and distributed through this branch.

Reference has been made above to two irrigation schemes undertaken during the past year and their importance warrants the more extended notice given below.

#### THE SPRINGBANK IRRIGATION CANAL.

Many of the best authorities and writers on the subject of irrigation claim that the best results in applying water to the land through the principle of irrigation are obtained from canals constructed and owned as municipal or mutual undertakings.

To permit of the introduction of irrigation systems of this character The Irrigation Ordinance was passed by the Legislative Assembly some years ago, and was amended and consolidated at the session of 1899. The Springbank Irrigation District was the first and in fact the only district so far organised under this Ordinance and although its organisation was completed in 1894 it was only last year that it finally raised the necessary amount for the construction of the proposed canal and commenced the work of construction.

The Springbank Irrigation District comprises an area of some 50,000 acres lying to the west of Calgary and between the Bow and Elbow Rivers. The water for the irrigation of this district is being diverted from the Jumping Pound Creek, which bounds the district on the west, and the soil and climatic conditions within the district justify the expectation that if the canal and dependent works of the district are constructed with due regard to proper scientific methods and in an economical manner, the results obtained from the application of water through the principle of irrigation should be of a highly remunerative and satisfactory character and go far towards the establishment of irrigation undertakings in the Territories as municipal undertakings on a firm and lasting basis.

#### CANADIAN NORTH-WEST IRRIGATION COMPANY'S CANAL.

This undertaking is a corporate venture promoted by the above company and ranks with the large irrigation undertakings of Western America. The main canal of the company diverts water from the St. Mary's River at a point about nine miles south-east from Cardston in Southern Alberta and carries the water from that point by a large canal to the high bench land or plateau lying south and south-east of Lethbridge. The work of constructing the main canal and necessary distributing system was commenced in the fall of 1898 and it has been progressing more or less vigorously ever since, the expectation now being that the main system, involving



the construction of about 70 miles of canal with extensive headgates, flumes, etc., will be completed early this year.

The canal is designed to supply water for the irrigation of some 500,000 acres of land in the district above referred to, and the unusually favourable soil and climatic conditions, as well as the abundant natural growth of grass for grazing purposes in the district make it certain that with the transforming influences of water, applied through irrigation in producing grain and fodder crops, the development and prosperity of that portion of the Territories is assured.

It may be noted as a matter of interest in connection with this project that the undertaking includes works for the distribution of water in open ditches through the streets of the town of Lethbridge and therefore marks the introduction in the Territories of a principle which has been instrumental in beautifying many towns and cities in irrigable states to the south of us by the growth of trees along the streets not possible under existing natural conditions.

The project of this company also includes the bringing in of desirable immigrants for settlement on the lands to be irrigated from their canal and during the past year several hundred people were located on these lands.

#### CONCLUSION.

In the foregoing report no attempt is made to give more than a brief resume of the transactions of the Department during the past year. Many of the subjects dealt with are deserving of extended and detailed discussion but it has been felt that the organisation of the Department is of such comparatively recent date, and so much of the work we are doing is in the formative and empirical stage, that it is well for a few years, or until the work more fully develops, to confine the annual report to such matters only as may be necessary for reference or intelligent public discussion.

I have the honour to be, Sir,

Your obedient servant,

J. S. DENNIS,

*Deputy Commissioner.*

# INDEX.

	PAGE
Accountant's work increased by Local Improvement branch .....	15
Assessment of Large Local Improvement Districts.....	61
Bridges, damage to.....	7
"    construction of .....	29
"    policy respecting.....	29
Coal mines, operated during year .....	12
"    output of, and number of men employed in.....	12
"    accidents in .....	13
"    inspection of .....	13
Correspondence, volume of .....	8
Dams, damage to.....	7
"    old ones poorly constructed .....	29
"    policy respecting .....	29
"    number in use and value of .....	35
Departmental offices, increased accommodation needed.....	28
Engineers and surveyors, offices of centralised.....	7
Farmers, interest of, in good roads .....	32
Ferries, damage to .....	7, 32
"    maintenance of .....	32
"    change in method of payment for operation of .....	33
Fireguards, system of construction of .....	34
"    difficulty of getting one surrounding Moose Mountain completed....	34
"    should be constructed by Large Local Improvement Districts.....	34
"    railway companies ought to construct .....	34
Irrigation, work of branch and importance of .....	64
"    canals in course of construction .....	65
Local Improvement branch, increase of work in.....	15
"    "    duties of.....	36
"    Districts, list of.....	37
"    "    work done by. and taxes collected .....	59
"    "    commutation of taxes in, labour wasted.....	60
"    "    should repair public works.....	29
"    "    construction of fireguards by.....	34
"    "    list of Large .....	61
"    "    assessment of Large .....	61
"    "    opposition to taxes in Large .....	62
Normal school buildings.....	28
Public works, difficulties in dealing with .....	7
"    damage to .....	7
"    repair of .....	28
"    "    effort to reduce future charges .....	29
"    work of Local Improvement Districts in connection with.....	29
"    reorganisation of Department of .....	7
Railway companies, compulsion of, to construct fireguards .....	34

Reservoirs, dams to form .....	35
Road allowances closed during year .....	26
Roads, why troublesome problem to deal with .....	31
" interest of farmers in good .....	32
Steam boilers, number inspected .....	8
" certificates to operate, issued .....	8
" permits to operate, issued .....	8
" inspection fees collected .....	9
" examinations for certificates to operate .....	9
" list of holders of certificates to operate .....	10
Surveyors and engineers, offices of, centralised .....	7
Survey, improvement in carrying on work of .....	15
" government cannot always make without permission .....	15
" size of country causes many applications for .....	15
" work during year .....	16
Survey of Edmonton-Peace River road :	
Exploratory—Riviere-qui-Barre to Saulteaux Creek.—Report of T. W. Chalmers, D.L.S. ....	19
Exploratory—Peace River Landing to Cust House.—Report of A. McFee, D.L.S. ....	22
Villages, details respecting .....	62
Water, difficulty of dealing with question .....	34
" means used to obtain .....	35
" reservoirs for storage of .....	35







